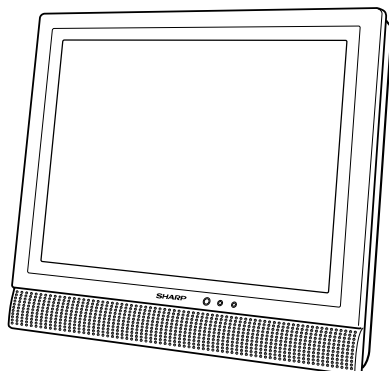


SHARP

SERVICE MANUAL

S72M5LC-20E1U



LCD COLOR TELEVISION

LC-20E1U LC-20E1UB/UW

MODELS

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

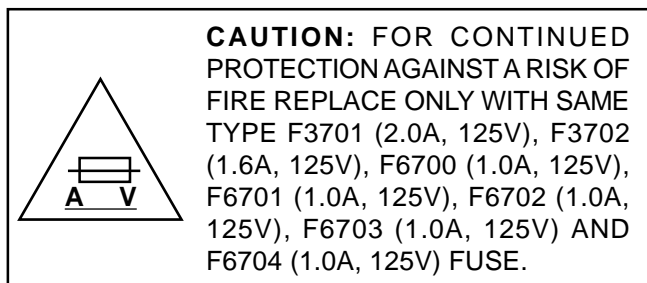
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

- **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.



BEFORE RETURNING THE RECEIVER (Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks:

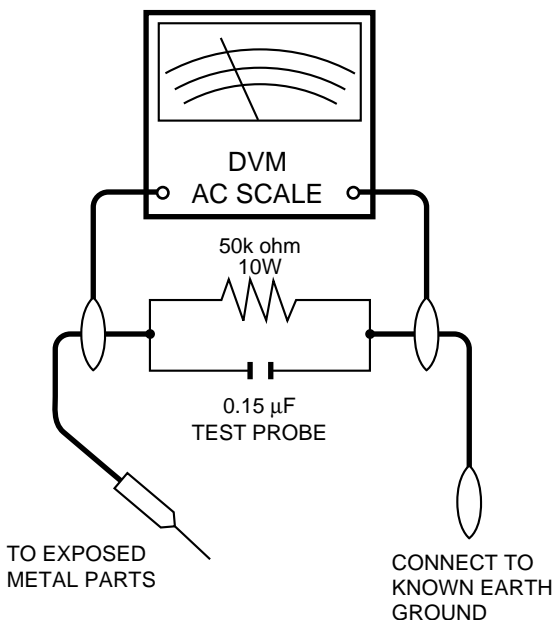
1. Inspect all lead dress to make certain that leads are not pinched, and check that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC cord directly into a 110~240 volt AC outlet, and connect the DC power cable into the receiver's DC jack. (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 50k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth

ground, such as electrical conduit or electrical ground connected to an earth ground.

- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC cord plug connection reversed. (If necessary, a nonpolarized adaptor plug must be used only for the purpose of completing these checks.)

Any reading of 0.75V peak (this corresponds to 0.5 milliamp. peak AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the monitor to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD television have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by “⚠”

and shaded areas in the **Replacement Parts Lists** and **Schematic Diagrams**.

For continued protection, replacement parts must be identical to those used in the original circuit.

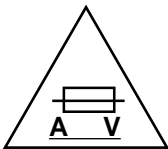
The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

PRECAUTIONS A PRENDRE LORS DE LA REPARATION

■ Ne peut effectuer la réparation qu' un technicien spécialisé qui s'est parfaitement accoutumé à toute vérification de sécurité et aux conseils suivants.

AVERTISSEMENT

1. N'entreprendre aucune modification de tout circuit. C'est dangereux.
2. Débrancher le récepteur avant toute réparation.



PRECAUTION: POUR LA PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE, REMPLACER LE FUSIBLE PAR UN FUSIBLE DE MEME TYPE F3701 (2.0A, 125V), F3702 (1.6A, 125V), F6700(1.0A, 125V), F6701(1.0A, 125V), F6702(1.0A, 125V), F6703(1.0A, 125V), F6704(1.0A, 125V).

VERIFICATIONS CONTRE L'INCEN-DIE ET LE CHOC ELECTRIQUE

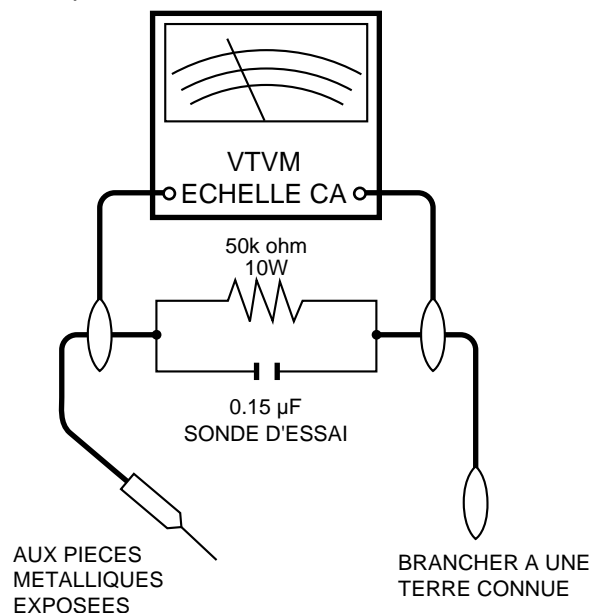
Avant de rendre le récepteur à l'utilisateur, effectuer les vérifications suivantes.

1. Inspecter tous les faisceaux de câbles pour s'assurer que les fils ne soient pas pincés ou qu'un outil ne soit pas placé entre le châssis et les autres pièces métalliques du récepteur.
2. Inspecter tous les dispositifs de protection comme les boutons de commande non-métalliques, les isolants, le dos du coffret, les couvercles ou blindages de réglage et de compartiment, les réseaux de résistance-capacité, les isolateurs mécaniques, etc.
3. S'assurer qu'il n'y ait pas de danger d'électrocution en vérifiant la fuite de courant, de la façon suivante:
 - Brancher le cordon d'alimentation directement à une prise de courant de 110-240V. (Ne pas utiliser de transformateur d'isolation pour cet essai).
 - A l'aide de deux fils à pinces, brancher une résistance de 50 k Ω 10 watts en parallèle avec un condensateur de 0,15 μ F en série avec toutes les pièces métalliques exposées du coffret et une terre connue comme une

conduite électrique ou une prise de terre branchée à la terre.

- Utiliser un voltmètre CA d'une sensibilité d'au moins 5000 Ω /V pour mesurer la chute de tension en travers de la résistance.
- Toucher avec la sonde d'essai les pièces métalliques exposées qui présentent une voie de retour au châssis (antenne, coffret métallique, tête des vis, arbres de commande et des boutons, écusson, etc.) et mesurer la chute de tension CA en-travers de la résistance. Toutes les vérifications doivent être refaites après avoir inversé la fiche du cordon d'alimentation. (Si nécessaire, une prise d'adpatation non polarisée peut être utilisée dans le but de terminer ces vérifications.) Tous les courants mesurés ne doivent pas dépasser 0,5 mA.


Dans le cas contraire, il y a une possibilité de choc électrique qui doit être supprimée avant de rendre le récepteur au client.



AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les téléviseurs présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue. Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont

identifiées par la marque "  " et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques.

Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies, radiations X ou autres accidents.

Precautions for using lead-free solder

1 Employing lead-free solder

"All PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

LFa

Sn-Ag-Cu

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldening bit, contact our service station or service ranch in your area.

3 Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be excooded, remove the bit from the PWB as soon as you conurn the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to tum on and off the power of the bit as required.

if a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Becareful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No,	★	Description	Code
ZHNDai123250E	J	φ0.3mm 250g(1roll)	BL
ZHNDai126500E	J	φ0.6mm 500g(1roll)	BK
ZHNDai12801KE	J	φ1.0mm 1kg(1roll)	BM

SPECIFICATIONS

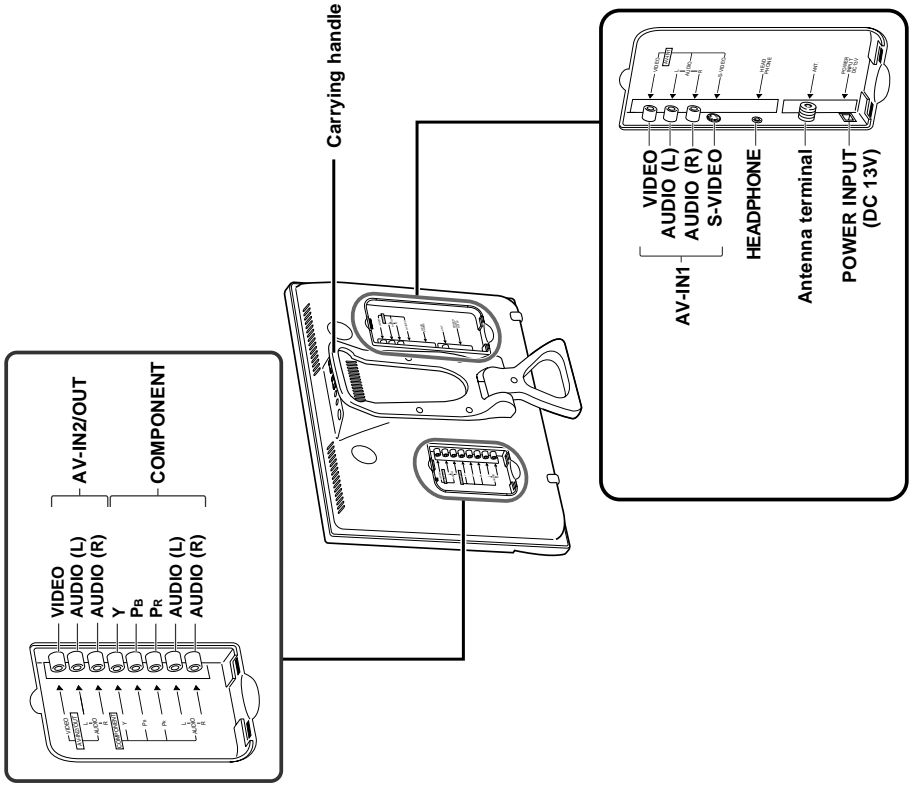
Items	Model	LC-20E1U
LCD panel		19.7" ASV & BLACK-TFT LCD
Number of dots		921,600 dots VGA
Video color systems		N358, N443, PAL, PAL-M, PAL-N, SECAM, PAL-60
TV function	Destination	USA/Latin A/Twn
	TV Standard (CCIR)	NTSC/PAL-M/PAL-N
	TV Tuning System	PLL 181 ch.
	STEREO	MTS+SAP
	CATV	125 ch.
3 Dimensional Y/C separation circuit		Yes (N358 only)
Digital comb filter		Yes
Brightness		430 cd/m ²
Lamp life		60,000 hours
Viewing angles		H: 170° V: 170°
Audio amplifier		2.5 W × 2
Speakers		1 ³⁷ / ₆₄ × 2 ³ / ₄ in. (4 × 7 cm), 2 pcs.
Terminals	AV1	AV-IN1, S-VIDEO-IN
	AV2	AV-IN2/AV-OUT
	COMPONENT	COMPONENT-IN, AUDIO-IN
	Antenna	F-Type
	Headphone	Mini-jack for stereo (ø 3.5 mm)
OSD language		English/French/Spanish
Power supply		DC 13 V, AC 110–240 V, 50/60 Hz
Weight		15.7 lbs (7.1 kg), w/o accessories
Accessories		Remote control, Batteries, Antenna cable, AC adapter, AC cord, Cable clamp, Operation Manual
Environmental Conditions		0°C~40°C

Specifications are subject to change without prior notice.

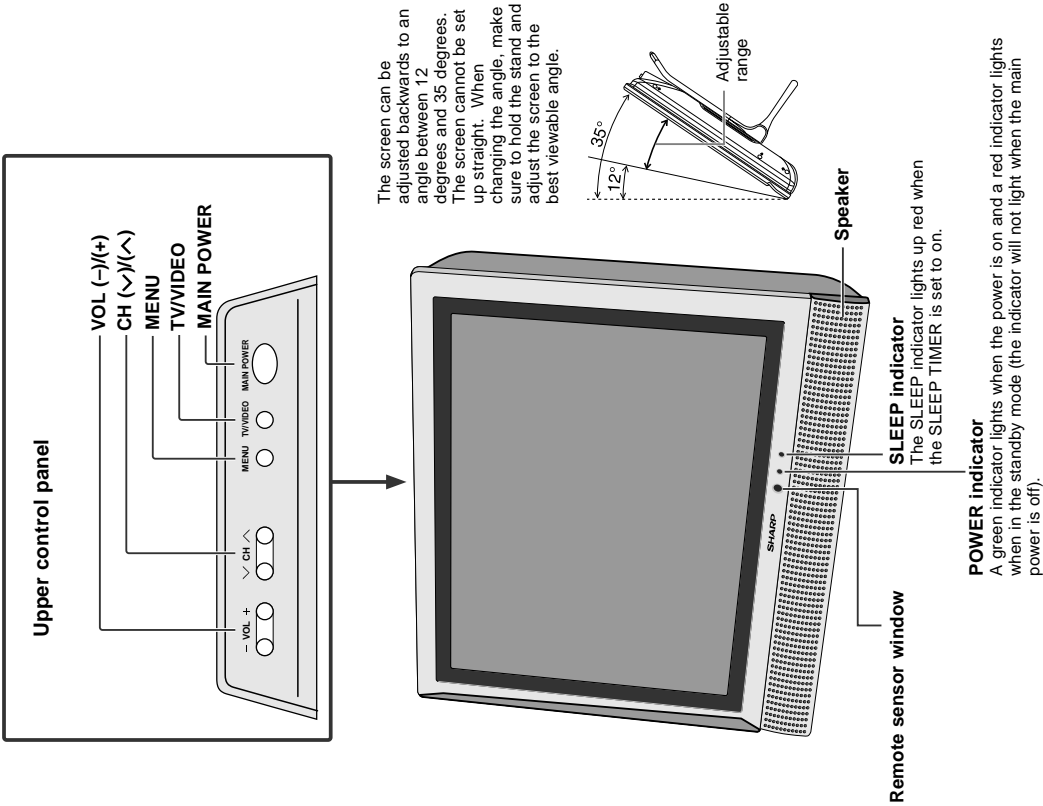
OPERATION MANUAL

FRONT AND REAR CONTROL OPTIONS

Main unit (rear view)



Main unit (front view)

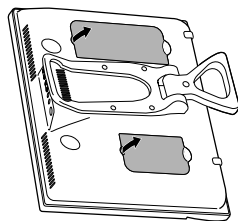


NOTE
• TV/VIDEO, CH (v)/(^), VOL (-)/(+), and MENU on the main unit have the same functions as the same buttons on the remote control. Basically, this operation manual provides a description based on operation with the remote control.

FRONT AND REAR CONTROL OPTIONS (Continued)

Removing the Back Cover

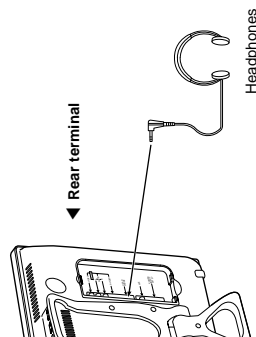
■ Before connecting a connection cord into the rear terminal, remove the back cover. Push in the tab and pull out the back cover carefully.



■ To mount the cover, insert the 2 hooks on the bottom of the cover into the cabinet and press on the upper part of the back cover until the tab locks in place with a click.

Listening with Headphones

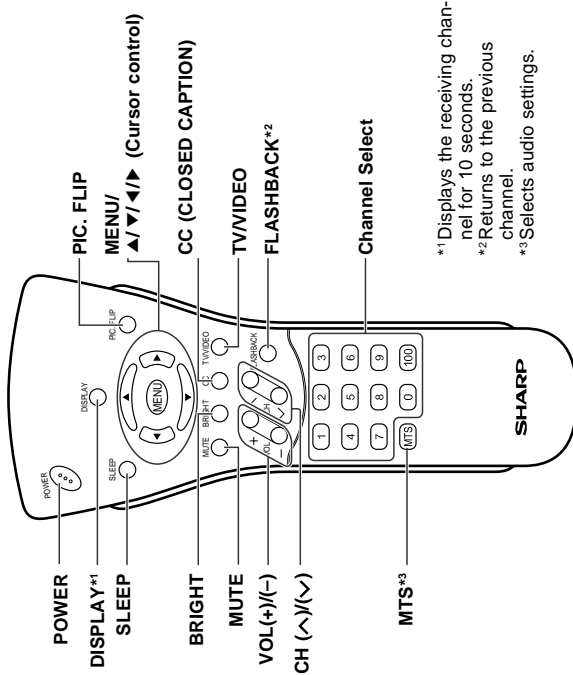
■ Plug the headphone mini-plug into the HEADPHONE jack located on the rear of the TV set.



NOTE

- Headphones are not included in the supplied accessories.
- No sound will be heard from the main unit speakers when a headphone mini-plug is connected into the HEADPHONE jack.

REMOTE CONTROL



*1 Displays the receiving channel for 10 seconds.

*2 Returns to the previous channel.

*3 Selects audio settings.

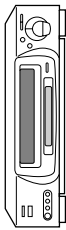
CONNECTING WITH EXTERNAL DEVICES

You can enjoy picture and sound by connecting a VCR or a home video game system to the terminals located on the rear of the TV set.
When connecting an external device, turn off the power of the main unit first to prevent any possible damage.

Example of external devices that can be connected

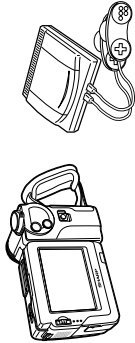
External devices that can be connected to AV-IN2 terminal

- <Example>
- VCR
 - Laser disc player



External devices that can be connected to AV-IN1 terminal

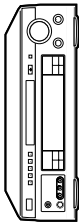
- <Example>
- Video camera
 - Home video game system



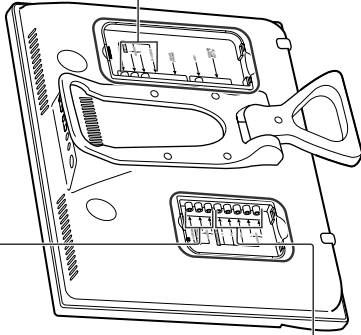
* If your external device has an S-Video terminal, S-VIDEO connection is recommended.

External devices that can be connected to COMPONENT terminal

- <Example>
- DVD, etc.



* If your external device has a component terminal, COMPONENT connection is recommended (you can view high-quality pictures).



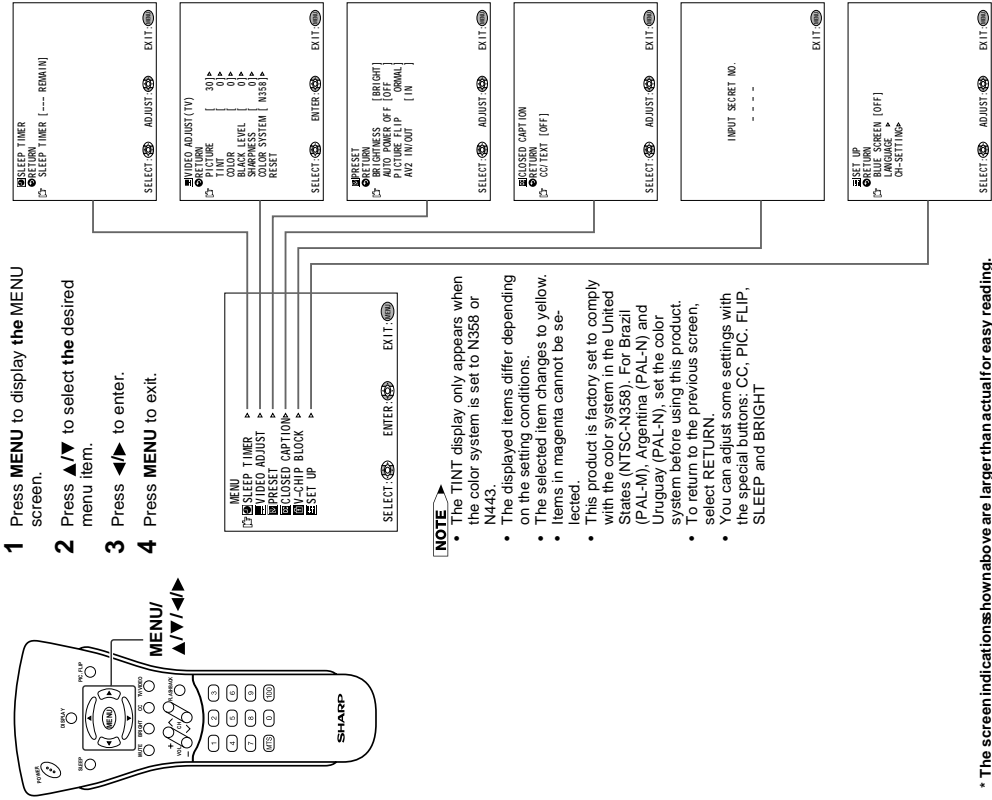
NOTE

- PC connection is not possible.
- For the cable, use a commercially available audio/video cable.
- Only connect audio/video signals to AV-IN1 and 2 terminals. Connecting other signals may result in a malfunction.
- AV-IN1 has 2 video input terminals: VIDEO and S-VIDEO. When you connect external devices to both terminals (and if you select AV-IN1), you can only view pictures from the S-VIDEO terminal. To view the picture from the VIDEO terminal, do not connect any external device to the S-VIDEO terminal.
- For more information about external device connections, see the manuals of your external devices.

SELECTING MENU ITEMS

Selecting Menu Items

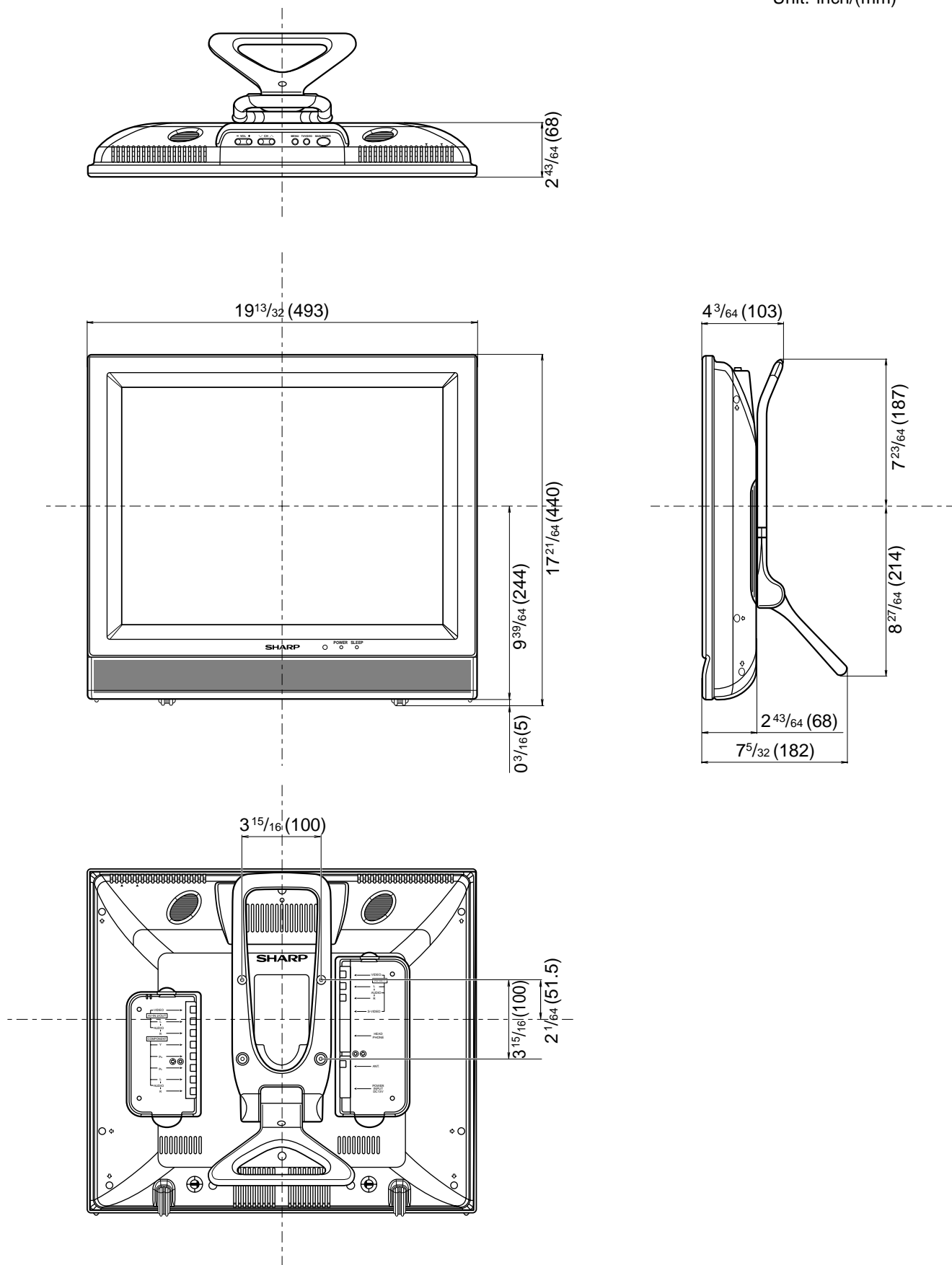
- This LCD TV set allows you to adjust the various settings using the menu screen. Select the desired menu item by following the steps below and then refer to the indicated page for details.



* The screen indications shown above are larger than actual for easy reading.

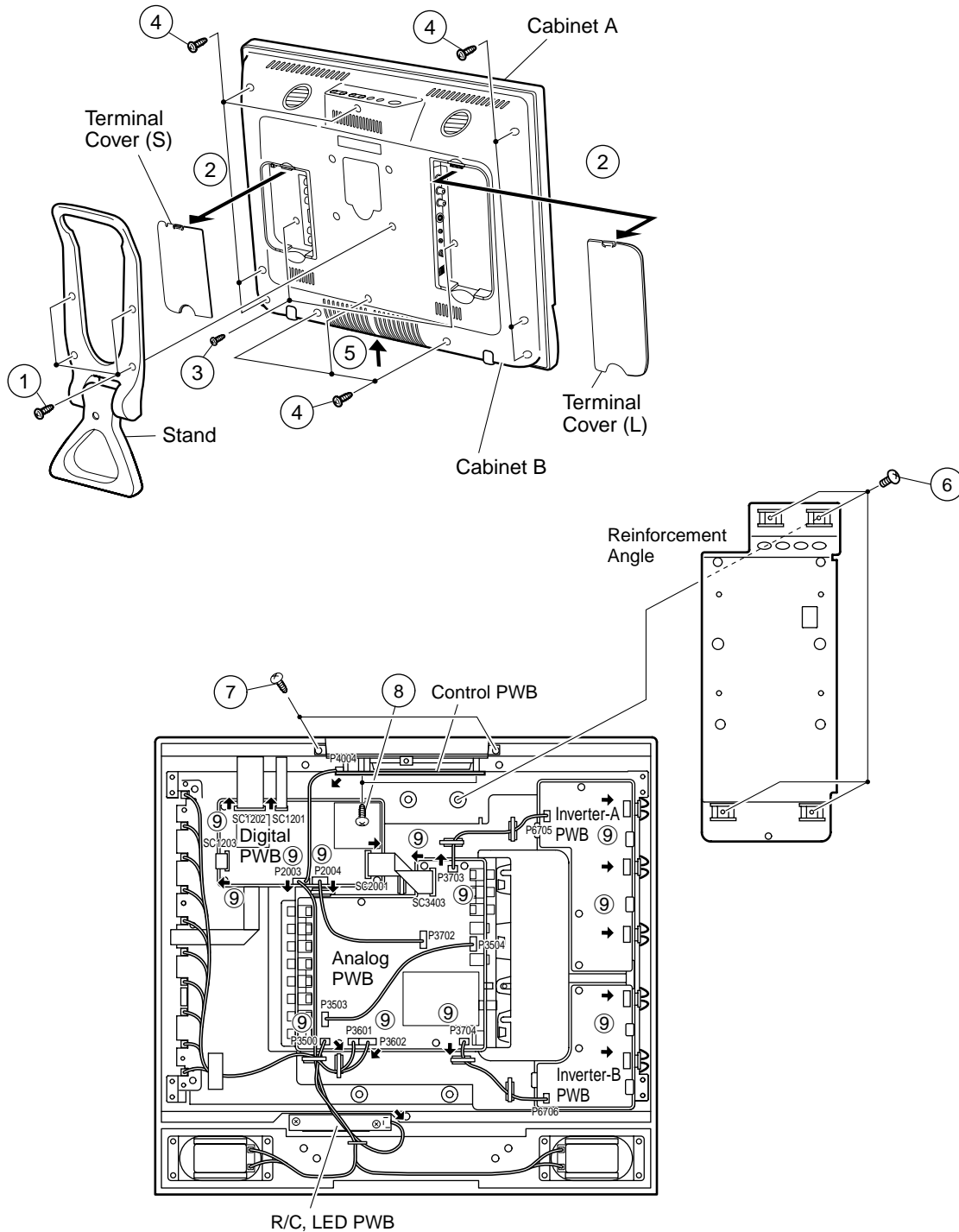
DIMENSIONS

Unit: inch/(mm)

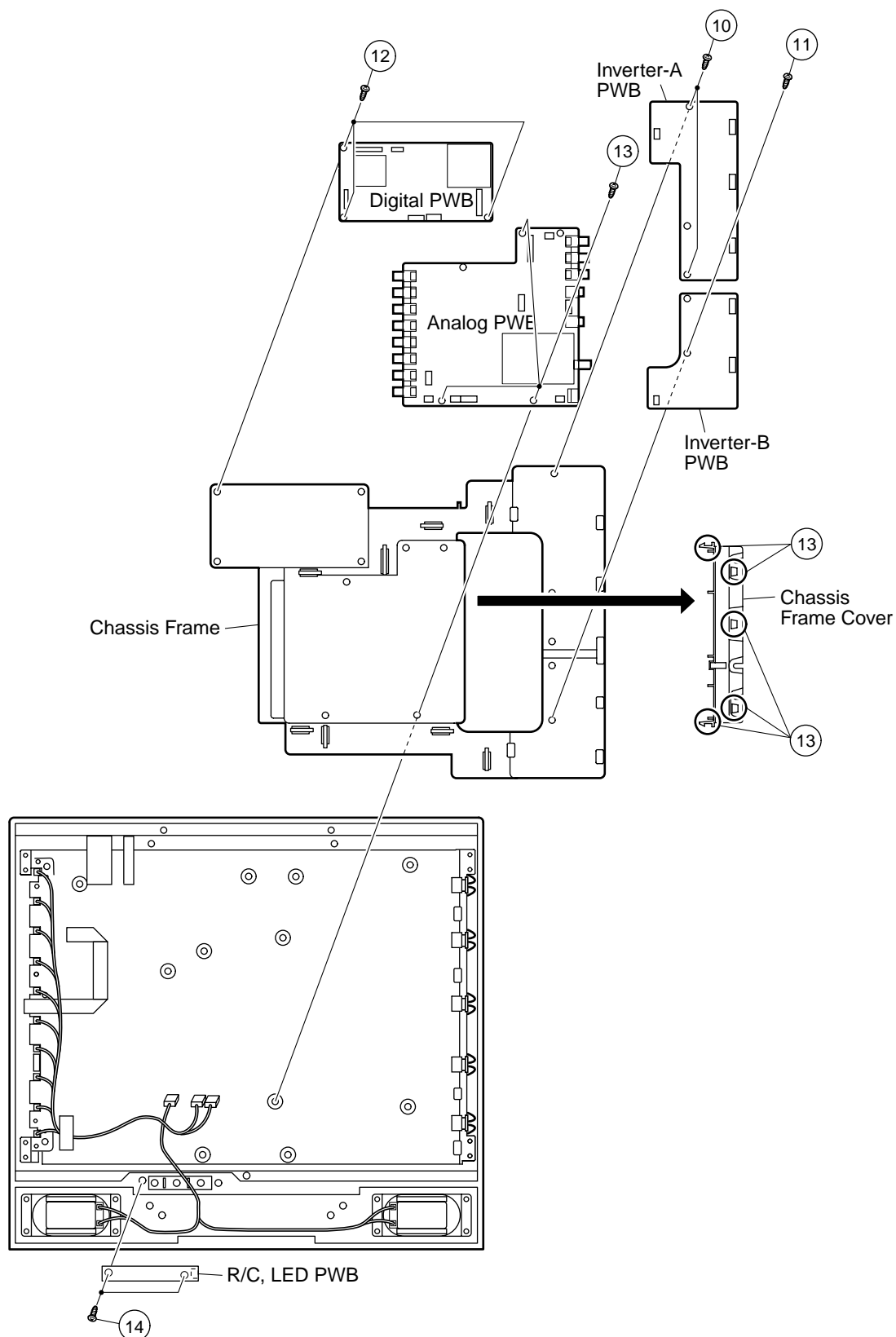


REMOVING OF MAJOR PARTS

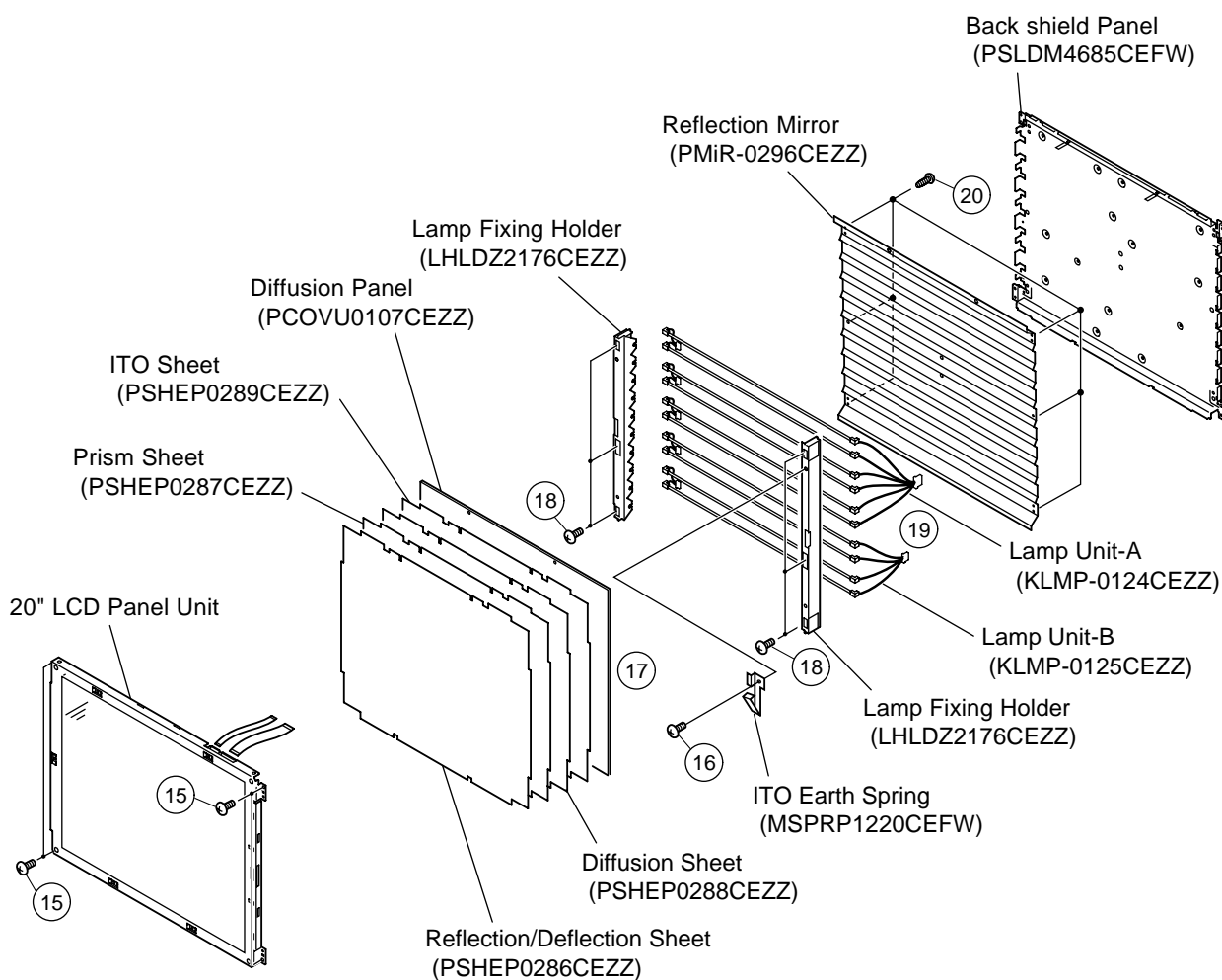
1. Remove the table stand fixing screws (4 pcs.).
2. Remove the two terminal covers.
3. Remove the terminal section fixing screws (2 pcs.).
4. Remove the cabinet B fixing screws (10 pcs.).
5. Remove the cabinet B after opening from the direction of an arrow.
6. Remove the reinforcement angle fixing screws (4 pcs.).
7. Remove the top cover fixing screws (2 pcs.).
8. Remove the control PWB fixing screws (2 pcs.).
9. Detach the connector from each PWB.



10. Remove the inverter-A PWB fixing screws (2 pcs.).
11. Remove the inverter-B PWB fixing screws (1 pc.).
12. Remove the digital PWB fixing screws (3 pcs.).
13. Remove the analog PWB fixing screws (3 pcs.) and detach the chassis frame cover fixing hooks.
14. Remove the R/C, LED PWB fixing screws (2 pcs.).

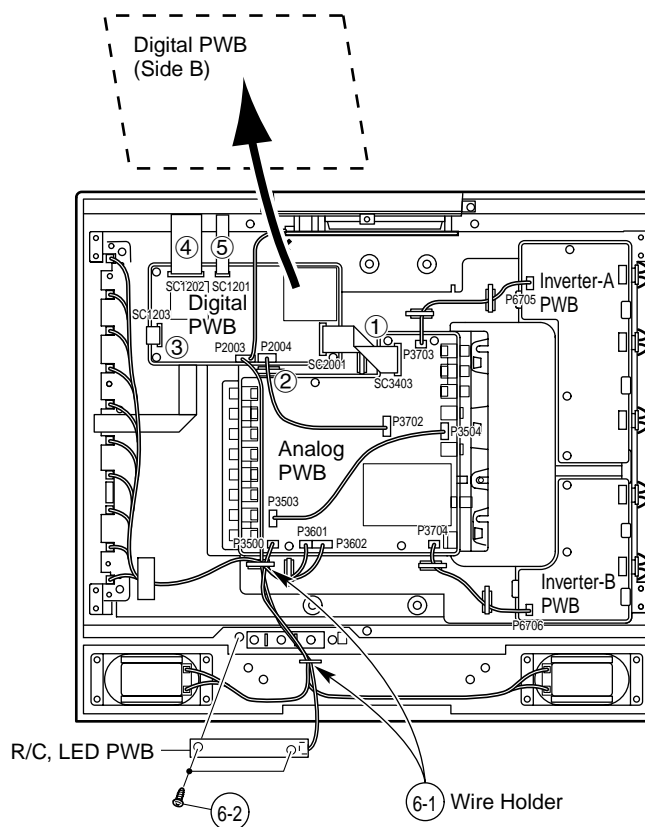


- Precautions in handling the LCD panels
 1. Work in a clean room (with humidities below 50%).
 2. Be sure to wear an anti-static armband.
 3. Handle the panels on an electroconductive mat.
 4. Be careful not to fall, shake and shock the panels.
15. Remove the LCD panel unit fixing screws (4 pcs.).
 16. Remove the ITO earth spring fixing screw (1 pc.).
 17. Remove the reflection/deflection, prism, diffusion, ITO sheets and diffusion panel.
 18. Remove the lamp fixing holder fixing screws (6 pcs.).
 19. Detach the lamp unit-A/B.
 20. Remove the reflection mirror fixing screws. (6 pcs.).



Precautions at the time of the side B(back) service of digital unit.

1. Remove only SC2001 of the FFC for connection between Digital unit(SC2001) and Analog unit(SC3403), and connect the extended cable (QCNW-A556WJZZ) for service.
2. Remove only P2004 of the Connecting Cord for connection between Digital unit(P2004) and Analog unit(P3702), and connect the extended cable (QCNW-A552WJZZ) for service.
3. Remove the FFC for connection between Digital unit(SC1203) and LCD panel unit, and connect the extended cable (QCNW-A553WJZZ) for service.
4. Remove the FFC for connection between Digital unit(SC1202) and LCD panel unit, and connect the extended cable (QCNW-A556WJZZ) for service.
5. Remove the FFC for connection between Digital unit(SC1201) and LCD panel unit, and connect the extended cable (QCNW-A555WJZZ) for service.
6. Remove the R/C, LED unit.
 - 6-1. Remove a lead from a wire holder.
 - 6-2. Remove the R/C, LED unit fixing screws(2 pcs.).
7. Remove the main unit fixing screws(3 pcs.), a substrate is reversed.



ADJUSTING PROCEDURE OF EACH SECTION

The best adjustment is made before shipping. If any position deviation is found or after part replace is performed, adjust as follows.

1. Preparation for Adjustments

(1) Use the exclusive-use AC adapter or stable DC power supply.

AC adapter: UADP-0243CEPZ

DC power supply: $13 \pm 0.5V$

2. Special mode setting procedure

(1) After initialization of E²PROM the mode is changed to the adjustment mode.

[Procedure]

Connect TP2001 and TP2002 to GND, and turn on the power.

[Description]

- The initialization of microprocessor is as follows.
- AV position, DAC data, G/A data, sound processor data, and video chroma data adjustment values are taken as defaults.

(2) Adjustment mode

[Procedure]

Short-circuit TP2001 to GND, and turn on the power.

Or short-circuit TP2002 to GND, and turn on the power.

Or holding down the [TV/VIDEO] key and [MENU] key, turn on the main power, and simultaneously press the (inspection process) [CH ▼] key and [VOL–] key to change the mode to the adjustment mode.

[Description]

The manual adjustment or adjustment through communication with the automatic machine is performed.

(3) Shipping setting mode

[Procedure]

Holding down the [TV/VIDEO] key and [MENU] key, turn on the main power, and simultaneously press the (inspection process) [CH ▲] key and [VOL+] key to change the mode to the shipping setting mode.

Note: Keep it in mind to turn off the power immediately. If any key-in is accidentally made, the setting will be canceled.

[Description]

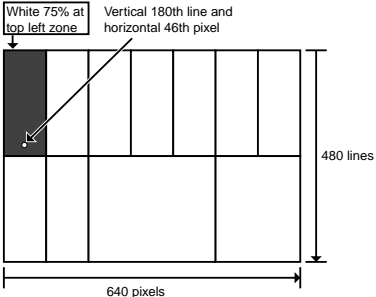
User adjustment and other values are taken as defaults.

If TV is indicated as SETTING COMPLETE, setting has been completed.

3. Cancel of special mode

Turn off the main unit power.

4. Adjustments

	Adjustment	Adjusting conditions	Adjusting method
1	B+ Adjustment (R3760)	1. Connect the DC voltmeter to pin 2 of P3702.	1. Adjust the "B+ Adj" value to $5.0 \pm 0.02V$ with R3760. Make exact adjustment of the 5.00V level because it will be the reference for all the other supply voltages. Be sure to make this adjustment together with the main PWB (digital PWB). During the adjustment, be also careful not to allow the voltage at pin (2) of P3702 to go above 5.3 V.
2	Inch Size setup (If E ² PROM is replaced) (IC2004)	1. Go to the adjustment mode.	1. Select "INCH SIZE" and adjust to "20" with [VOL+] or [VOL-] key. * The color of "INCH SIZE" must be yellow.
3	Common-bias adjustment	1. Receive a B/W channel. 2. Go to the adjustment mode. 3. Select the "COM BIAS" with [MENU] key.	1. Adjust "COM BIAS" to the darkest screen with [VOL+] and [VOL-] key. * The color of "COM BIAS" must be yellow.
4	TAMP adjustment	<p>1. Receive a half color bar signal in the TV mode so that the top left zone should turn white 75% as shown below. Other signal can be fed instead of the half color bar signal, however, if the point at the vertical 180th line and horizontal 46th pixel is of white 75%. (Make the adjustment based on the setting of this point.)</p> <p>2. Adjust the "NTSC TAMP" setting on page 2 of adjustment process mode so that the "Y" reading on the same page should be BB - CA.</p> <p>3. Make the same setting for the PAL-M TAMP and PAL-N TAMP data.</p>	 <p>White 75% at top left zone</p> <p>Vertical 180th line and horizontal 46th pixel</p> <p>480 lines</p> <p>640 pixels</p> <p>Page 2 of adjustment process mode</p> <pre> 2 ▶ COM BIAS 90 NTSCTAMP 20 PAL-M TAMP 20 PAL-N TAMP 20 RCUTOFF -1 GCUTOFF 0 BCUTOFF -1 G3 B3 R3 00 00 G1 B4 Y EF C7 TAMP H C2 TAMP L CA BB GAIBU VER0.000 </pre> <p>"Y" data (white 75%)</p>
5	White balance adjustment	<p>1. Receive the monoscope pattern signal.</p> <p>2. Adjust the "RCUTOFF" and "BCUTOFF" settings on page 2 of adjustment process mode to achieve an optimum white balance.</p>	1. Do not change the "GCUTOFF" setting because otherwise the black level may fluctuate.

5. Shipping setting list

Channel	2ch
Air/Cable	Air
Skip Data_CATV	All Skip
Skip Data_AIR	All Skip
Volume	20
Picture	30
Tint	0
Color	0
Black Level	0
SHARPNESS	0
RED-BLUE	0
GREEN	0
TV Color System	N358
AV Color System	N358
Language	English
Blue Screen	Off
EZ Setup Auto Start	On
Sleep Timer	None
MTS	Stereo
Brightness	Bright
Auto Power Off	Off
Picture Flip	Normal
AV2 IN/OUT	In
CC/TEXT	OFF
V Chip block (MPAA)	None
(TV Guideline)	None
(Block Content)	All Unblock
(Status)	Off
(Input Secret No.)	Clear

Test patterns in adjustment process mode

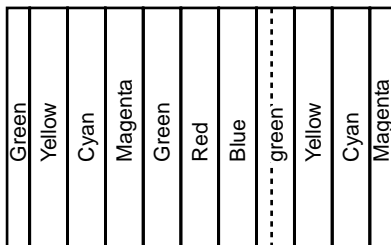
[1] IC801 (Video decoder) test patterns

1-1. Getting the test patterns displayed

Put the screen in AV1, AV2 or COMPONENT but keep out any signal. Call the adjustment process mode, select "TEST PATTERN" in the 3rd line of page 8, make the settings 1 thru 6, and the following test patterns show up.

1-2. Test patterns

● Setting 1

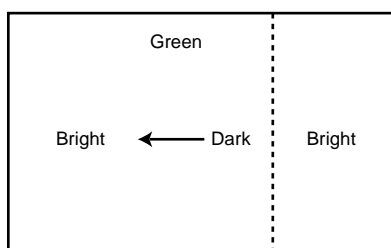


The color bars are displayed as shown at left.

● Setting 2

Finer vertical stripes than Setting 1 are displayed.

● Setting 3



The green pattern is displayed as shown at left.

● Setting 4

A rather dark green-only pattern is displayed.

● Setting 5

A half-tone green-only pattern is displayed.

● Setting 6

A rather bright green-only pattern is displayed.

[2] IC1201 (LCD controller) test pattern

2-1. Getting the test pattern displayed

Put the screen in AV1, AV2 or COMPONENT but keep out any signal. Call the adjustment process mode, select "G/A TEST PATTERN" in the 13th line of page 17, turn on the setting, and the following test pattern shows up.

2-2. Test pattern

The following test pattern appears.

	Dark	Gray scale	Bright	Dark
	Dark	Red	Bright	Dark
	Dark	Green	Bright	Dark
	Dark	Blue	Bright	Dark
White	Black 0-level gradation	Gray 16-level gradation	Gray 32-level gradation	Gray 48-level gradation
ite				White 63-level gradation

Note: When the IC801 and IC1201 test pattern display commands are both turned on at the same time, the IC1201 test pattern is given priority.

Pin functions of microprocessor IC (IC2001) RH-iXA300WJZZQ

No.	Pin name	Function	No.	Pin name	Function
1	V HOLD	Closed caption	51	REQ	Adjustment process
2	HLF	Closed caption	52	AV/SY/DY2	US CCD input select
3	MAIN SW	Main switch ON[H]/OFF[L]	53	FSMUTE	Front mute
4	TIMELED	Off timer LED light-up	54	RSMUTE	Rear mute
5	M/S OUT	Sub-microprocessor master/slave output	55	HPDET	Headphone detect at "L" level
6	CSYNC	Composite sync signal	56	SSTBY	Speaker standby (at "H" level)
7	IREMI	Remote control	57	VSH IN	Panel gate driver voltage check
8	GND	Grounding	58	LMUTE	Line out audio mute
9	GND	Grounding	59	V IN/OUT	Video input/output select
10	XCIN	32kHz oscillation input	60	SRESET	Multiplex reset at "L" level
11	XOUT	32kHz oscillation output	61	DENKA	Electric charge prevention
12	RESET	Reset at "L" level	62	VCC	Power
13	XOUT	Microprocessor oscillator connection	63	CARDPOW	Card (ON/OFF)
14	GND	Grounding	64	VSS	Grounding
15	XIN	Microprocessor oscillator connection	65	TV/AV1	Analog switch 1
16	VCC	Power	66	AV/AV2	Analog switch 2
17	OSCIN	OSD clock input	67	VIS/3DS	Analog switch 3
18	OSCOU	OSD clock output	68	AV1/VISY	Analog switch 4
19	PSWIN	Main power input	69	AV/SY/DY1	US CCD input select 2
20	SUBREADY	Sub-microprocessor ready input	70	STD	Microprocessor power off output
21	BLK	OSD blanking output	71	PMUTE	P mute
22			72	POWOUT	DC/DC control output
23	DAC1CS	DAC1 chip select	73	AD POW	Adaptor ON/OFF input
24	DAC2CS	DAC2 chip select	74	IREM 2	Reception at slave
25	D SW	D terminal connection detect	75	MPRCS	G/A read enable
26	DTV	D terminal control line	76	MPRDA	G/A data input
27	MRDY	I ² C bus open/closed select input	77	MPCS	G/A chip select
28	SCL2	I ² C bus serial clock line 2	78	MPDA	G/A data output
29	SCL1	I ² C bus serial clock line 1	79	MPCLK	G/A clock
30	SDA1	I ² C bus serial data line 1	80	DDCRESET	Digital decoder reset
31	SDA2	I ² C bus serial data line 2	81	KEY4	Key input 4
32	R	R signal output	82	KEY5	Key input 5
33	G	G signal output	83	CARDRESET	Card reset (at "H" level)
34	B	B signal output	84	SAW SW	Tuner select (at "H" level)
35	SUBD OUT	Sub-microprocessor data output	85	MODE1	Tuner select (at "H" level)
36	SUBDIN	Sub-microprocessor data input	86	MODE2	Tuner select (at "H" level)
37	SUBCLK	Sub-microprocessor clock input	87	SSYSTEM	S system switching detect
38			88	SSW	S terminal connect input at "L" level
39	MRDY OUT	I ² C bus open/closed output	89	AFT	AFT voltage input
40	FCH	No-signal field ID signal output	90	AGC	AGC voltage input
41	IREM OUT	Not used	91	KEY1	Key input 1
42	L_ERR	Fluorescent lamp error detect input	92	KEY2	Key input 2
43	S IN/OUT	Audio input/output select	93	KEY3	Key input 3
44	N443	"H" for N443, "L" for others	94	POWIN	DC/DC start-up detect
45	PAL	"H" for PAL, "L" for others	95	VSYNC	OSD vertical sync signal
46	SECAM	"H" for SECAM, "L" for others	96	AVSS	Analog power input (GND)
47	PAL_M	"H" for PAL-M, "L" for others	97	HSYNC	OSD horizontal sync signal
48	N358	"H" for N358, "L" for others	98	TVSETB	Closed caption (GND)
49	PXOE	Card (Card mode at "L" level)	99	AVCC	OSD power input
50	VSH OUT	Panel gate driver voltage control	100	CVIN	Closed caption signal input

Adjustment process mode menus at a glance

Page	Item	Initial setting	Function	Adjust/modify
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Basic settings

1	MODEL	E1U	Model number	
	INCH SIZE	20	Inch unit select	Adjustment
	SYSTEM	N358	Color system select	
	NTSC PWN FREQ	OCO	Dimmer frequency setting	
	PAL PWM FREQ	OBD	Dimmer frequency setting	
	NTSC PWM DUTY	0	Dimmer duty setting	
	PAL PWM DUTY	0	Dimmer duty setting	
	TV GAIN	OFF	Auto gain setting in TV mode	
	ERROR NO RESET	0	Lamp error count & reset	No. of lamp error detections
	PUBLIC MODE	OFF	HOTEL MODE	
	V-CHIP (US)	1	VCHIP line mute setting	
	CANADIAN VCHIP	OFF	Canadian VCHIP setting	
	E1UVER		Microprocessor Ver. No. display	

Video adjustments

2	COM BIAS	90	Counter bias adjustment	Adjustment
	NTSC TAMP	20	TAMP adjustment	Adjustment
	PAL-M TAMP	20	TAMP adjustment	Adjustment (Same setting as for NTSC TAMP)
	PAL-N TAMP	20	TAMP adjustment	Adjustment (Same setting as for NTSC TAMP)
	RCUTOFF	-1	White balance adjustment (Red)	Adjustment
	GCUTOFF	0	Green cutoff adjustment	
	BCUTOFF	-1	White balance adjustment (Blue)	Adjustment
	G3	00	Data read value	
	B3	00	Data read value	
	R3	00	Data read value	
	G1	00	Data read value	
	B4	00	Data read value	
	Y	00	Data read value at TAMP adjustment	
	TAMP H	CA	Y upper limit setting at TAMP adjustment	
	TAMP L	BB	Y lower limit setting at TAMP adjustment	
	GAIBU VER		External version display	
3	TV NTSC CONT	51	Video contrast setting (TV NTSC)	
	TV PAL-M CONT	51	Video contrast setting (TV PAL-M)	
	TV PAL-N CONT	51	Video contrast setting (TV PAL-N)	
	AV N358 CONTRAST	49	Video contrast setting (Composite, S Video)	
	AV PAL CONTRAST	49	Video contrast setting (Composite, S Video)	
	AV SECAM CONTRAST	49	Video contrast setting (Composite, S Video)	
	AV PAL-M CONTRAST	49	Video contrast setting (Composite, S Video)	
	AV PAL-N CONTRAST	49	Video contrast setting (Composite, S Video)	
	AV PAL60 CONTRAST	49	Video contrast setting (Composite, S Video)	
	G3	00	Data read value	
	B3	00	Data read value	
	R3	00	Data read value	
	G1	00	Data read value	
	B4	00	Data read value	
	Y	00	Data read value	

Audio adjustments

4	VOLUME	20	Volume	
	AVC	OFF	AVC setting	
	CARRIER MUTE	ON	Audio output setting out of sync with TV	
	IGR THR	12D	IGR THRESH LEVEL	
	MSP DATA	0	Audio IC MSP data write & read	
	MSP DATA	WAIT	Write & read execution	
	PRESCALE FM/AM-M	17	Pre-scale setting (TV)	
	PRESCALE SCART	15	Pre-scale setting (external input)	
	FSP TEST	OFF	Audio test (FS mute ON/OFF)	
5	MDB	ON	MDB	
	LVL	-10	WF level adjustment	
	FRQ	120	WF LPF cutoff frequency setting	
	STR	40	MDB amount of effects setting	
	LMC	-27	MDB limit value setting	
	HMC	00	MDB harmonics effect setting	

Page	Item	Initial setting	Function	Adjust/modify
5	HPF	100	MDB Zone restriction HPF cutoff frequency	
	LPF	110	MDB Zone restriction LPF cutoff frequency	
6	EXT GEQ BAND1	+1.0	Equalizer setting 1 (external input)	
	EXT GEQ BAND2	-1.0	Equalizer setting 2 (external input)	
	EXT GEQ BAND3	0.0	Equalizer setting 3 (external input)	
	EXT GEQ BAND4	0.0	Equalizer setting 4 (external input)	
	EXT GEQ BAND5	-2.0	Equalizer setting 5 (external input)	
	TV GEQ BAND1	+1.0	Equalizer setting 1 (TV)	
	TV GEQ BAND2	-1.0	Equalizer setting 2 (TV)	
	TV GEQ BAND3	0.0	Equalizer setting 3 (TV)	
	TV GEQ BAND4	0.0	Equalizer setting 4 (TV)	
	TV GEQ BAND5	-2.0	Equalizer setting 5 (TV)	

Video adjustments (VPC settings)

7	I2C DATA	0	I ² C bus control IC data write & read	
	I2C DATA	WAIT	Write & read execution	
	CBW	1	Chroma band pass setting	
	NOSEL	3	Comb filter setting	
	DDR	1	Comb filter setting	
	HDG	3	Comb filter setting	
	VDG	0	Comb filter setting	
	VPK	0	Comb filter setting	
	KILVL 08	08	Color killer level setting	
	KILHY 05	05	Color killer hysteresis setting	
	VSNC DELAY	29	V sync phase setting	
	DVCO	-720	DVCO setting	
	AUTO LCK	1	Line lock mode setting	

Video adjustments (component)

8	VPC DATA	0	Video IC VPC data write & read	
	VPC DATA	WAIT	Write & read execution	
	TEST PATTERN	0	VPC test pattern select	Video IC test pattern
	AUTO LDLY	0	Y/C phase setting	
	DVD NTSC CR	25	Color density setting (component)	
	DVD NTSC CB	25	Color density setting (component)	
	DVD NTSC TINT	+7	Color tone setting (component)	
	DVD NTSC BRIGHTNESS	+68	Brightness setting (component)	
	DVD NTSC CONTRAST	26	Video setting (component)	
	DVD NTSC P FILTER	1	Peaking filter setting (component)	
	DVD NTSC H-PEAKING	3	Picture quality setting (component)	
	DVD NTSC BRIGHT2	+8	Brightness setting 2 (component)	
	DVD NTSC CONTRAST2	48	Video setting 2 (component)	
9	DVD PAL CR	24	Color density setting (component)	
	DVD PAL CB	24	Color density setting (component)	
	DVD PAL TINT	+ 9	Color tone setting (component)	
	DVD PAL BRIGHTNESS	+68	Brightness setting (component)	
	DVD PAL CONTRAST	26	Video setting (component)	
	DVD PAL P FILTER	1	Peaking filter setting (component)	
	DVD PAL H-PEAKING	4	Picture quality setting (component)	
	DVD PAL BRIGHT2	+8	Brightness setting 2 (component)	
	DVD PAL CONTRAST2	48	Video setting 2 (component)	

Video adjustments (TV, composite & S video)

10	N358 TV COLOR	2500	Color density setting (TV)	
	N358 AV COLOR	2500	Color density setting (composite, S video)	
	N358 TV TINT	+40	Color tone setting (TV)	
	N358 AV TINT	+56	Color tone setting (composite, S video)	
	N358 BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	N358 PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	N358 TV H-PEAKING	4	Picture quality setting (TV)	
	N358 AV H-PEAKING	4	Picture quality setting (composite, S video)	
	N358 AVO START	152	Horizontal position setting	
	N358 SFIF	0	Horizontal position setting	
	N358 SCINC1	1623	Roundness setting	

Page	Item	Initial setting	Function	Adjust/modify
10	N358 TV LDLY	0	Y/C phase setting (TV)	
	N358 AV LDLY	0	Y/C phase setting (composite, S video)	
11	N443 AV COLOR	2500	Color density setting (composite, S video)	
	N443 AV TINT	+56	Color tone setting (composite, S video)	
	N443 BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	N443 PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	N443 AV H-PEAKING	4	Picture quality setting (composite, S video)	
	N443 AVO START	152	Horizontal position setting	
	N443 SFIF	0	Horizontal position setting	
	N443 SCINC1	1623	Roundness setting	
	N443 AV LDLY	0	Y/C phase setting (composite, S video)	

Video adjustments (TV, composite & S video)

12	PAL AV COLOR	2500	Color density setting (composite, S video)	
	PAL AV TINT	+56	Color tone setting (composite, S video)	
	PAL BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	PAL PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	PAL AV H-PEAKING	4	Picture quality setting (composite, S video)	
	PAL AVO START	152	Horizontal position setting	
	PAL SFIF	0	Horizontal position setting	
	PAL SCINC1	1623	Roundness setting	
	PAL AV LDLY	0	Y/C phase setting (composite, S video)	
13	SECAM AV COLOR	2500	Color density setting (composite, S video)	
	SECAM AV TINT	+56	Color tone setting (composite, S video)	
	SECAM BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	SECAM PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	SECAM AV H-PEAKING	4	Picture quality setting (composite, S video)	
	SECAM AVO START	152	Horizontal position setting	
	SECAM SFIF	0	Horizontal position setting	
	SECAM SCINC1	1623	Roundness setting	
14	SECAM AV LDLY	0	Y/C phase setting (composite, S video)	
	PAL-M TV COLOR	2500	Color density setting (TV)	
	PAL-M AV COLOR	2500	Color density setting (composite, S video)	
	PAL-M TV TINT	+40	Color tone setting (TV)	
	PAL-M AV TINT	+56	Color tone setting (composite, S video)	
	PAL-M BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	PAL-M PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	PAL-M TV H-PEAKING	4	Picture quality setting (TV)	
	PAL-M AV H-PEAKING	4	Picture quality setting (composite, S video)	
	PAL-M AVO START	152	Horizontal position setting	
	PAL-M SFIF	0	Horizontal position setting	
	PAL-M SCINC1	1623	Roundness setting	
	PAL-M TV LDLY	0	Y/C phase setting (TV)	
15	PAL-M AV LDLY	0	Y/C phase setting (composite, S video)	
	PAL-N TV COLOR	2500	Color density setting (TV)	
	PAL-N AV COLOR	2500	Color density setting (composite, S video)	
	PAL-N TV TINT	+40	Color tone setting (TV)	
	PAL-N AV TINT	+56	Color tone setting (composite, S video)	
	PAL-N BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	PAL-N PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	PAL-N TV H-PEAKING	4	Picture quality setting (TV)	
	PAL-N AV H-PEAKING	4	Picture quality setting (composite, S video)	
	PAL-N AVO START	152	Horizontal position setting	
	PAL-N SFIF	0	Horizontal position setting	
	PAL-N SCINC1	1623	Roundness setting	
	PAL-N TV LDLY	0	Y/C phase setting (TV)	
16	PAL-N AV LDLY	0	Y/C phase setting (composite, S video)	
	PAL60 AV COLOR	2500	Color density setting (composite, S video)	
	PAL60 AV TINT	+56	Color tone setting (composite, S video)	
	PAL60 BRIGHTNESS	+8	Brightness setting (TV, composite, S video)	
	PAL60 PEAKING FILTER	1	Peaking filter setting (TV, composite, S video)	
	PAL60 AV H-PEAKING	4	Picture quality setting (composite, S video)	
	PAL60 AVO START	152	Horizontal position setting	
	PAL60 SFIF	0	Horizontal position setting	
	PAL60 SCINC1	1623	Roundness setting	
	PAL60 AV LDLY	0	Y/C phase setting (composite, S video)	

Page	Item	Initial setting	Function	Adjust/modify
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Search AFT reference settings & LCD controller settings

17	AFT UP	2.7	AFT reference voltage	
	AFT DOWN	1.8	AFT reference voltage	
	NTSC 01	8C	Initial settings	
	NTSC 02	C0	Various settings	
	NTSC 03	81	RCUTOFF	
	NTSC 04	00	GCUTOFF	
	NTSC 05	81	BCUTOFF	
	NTSC 06	0C	Horizontal display position	
	NTSC 07	10	Vertical display position	
	NTSC 08	00	UV data phase delay	
	NTSC 09	4C	Panel clock adjustment	
	NTSC 0A	4B	Display screen top/bottom mask position	
	NTSC 10	80	Test pattern display	
	NTSC 11	00	Test pattern data	
	NTSC 12	00	Horizontal display mask (left) position	
	NTSC 13	00	Horizontal display mask (right) position	
	NTSC E0	00	FIFO TEST	
	NTSC E1	03	Sync polarity reversal	
	NTSC F0	07	OFL terminal operation setting	
	NTSC F1	00	Inverter frequency setting	
	NTSC F2	00	Inverter duty setting	
	NTSC F3	C0	Dimmer frequency setting, lower level	
	NTSC F4	00	Dimmer frequency setting, upper level	
	NTSC F5	00	Dimmer PWM setting, lower level	
	NTSC F6	00	Dimmer PWM setting, upper level	
	NTSC F7	00	OFL 1/2 phase	
	NTSC 14	02	System clock setting	
	G/A TEST PATERN	OFF	Gradation test pattern display	LCD controller IC test pattern
18	PAL 01	8E	Initial settings	
	PAL 02	C8	Various settings	
	PAL 03	81	RCUTOFF	
	PAL 04	00	GCUTOFF	
	PAL 05	81	BCUTOFF	
	PAL 06	14	Horizontal display position	
	PAL 07	18	Vertical display position	
	PAL 08	02	UV data phase delay	
	PAL 09	4C	Panel clock adjustment	
	PAL 0A	4A	Display screen top/bottom mask position	
	PAL 10	80	Test pattern display	
	PAL 11	00	Test pattern data	
	PAL 12	00	Horizontal display mask (left) position	
	PAL 13	00	Horizontal display mask (right) position	
	PAL E0	00	FIFO TEST	
	PAL E1	03	Sync polarity reversal	
	PAL F0	07	OFL terminal operation setting	
	PAL F1	00	Inverter frequency setting	
	PAL F2	00	Inverter duty setting	
	PAL F3	BD	Dimmer frequency setting, lower level	
	PAL F4	00	Dimmer frequency setting, upper level	
	PAL F5	00	Dimmer PWM setting, lower level	
	PAL F6	00	Dimmer PWM setting, upper level	
	PAL F7	00	OFL 1/2 phase	
	PAL 14	02	System clock setting	
	CLOSED CAPTION	15	Closed caption thresh level	
	CCD ISO	16	Closed caption phase setting	
	AIR SERCH	1.6	Last synchronous judging frequency at the AIR CH SEARCH	

Page	Item	Initial setting	Function	Adjust/modify
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Gradation & COM settings

19	V255	255	Gradation power reference voltage	
	V255 BIAS	127	Gradation power reference voltage	
	V235	222	Gradation power reference voltage	
	V235 BIAS	127	Gradation power reference voltage	
	V176	130	Gradation power reference voltage	
	V176 BIAS	150	Gradation power reference voltage	
	V112	96	Gradation power reference voltage	
	V112 BIAS	170	Gradation power reference voltage	
	V64	65	Gradation power reference voltage	
	V64 BIAS	40	Gradation power reference voltage	
20	V32	72	Gradation power reference voltage	
	V32 BIAS	100	Gradation power reference voltage	
	V21	45	Gradation power reference voltage	
	V21 BIAS	50	Gradation power reference voltage	
	V17	52	Gradation power reference voltage	
	V17 BIAS	145	Gradation power reference voltage	
	V7	27	Gradation power reference voltage	
	V7 BIAS	65	Gradation power reference voltage	
	V0	0	Gradation power reference voltage	
	V0 BIAS	80	Gradation power reference voltage	
	VGL ADJ	27	VGL bias setting	
	VGL COM	215	VGL COM setting	
	COM	179	COM amplitude setting	
	G/A READDATA	00 00	Controller read data setting	
	G/A READDATA	WAIT	Read execution	

Three-dimensional settings & sync ID settings

21	3D Y/C	2	3D ON/OFF setting	
	3D Y/C DATA	0	3D YC data write & read	
	3D Y/C DATA	WAIT	Write & read execution	
	LSYNC	625	Sync ID threshold level (TV)	
	HSYNC	655	Sync ID threshold level (TV)	
	AVSYNC	5000	Sync ID threshold level (external input)	
	VPC FP20H	DATA0000	VPC data read value	
	VPC FP21H	DATA0000	VPC data read value	
	VPC FP13H	DATA0000	VPC data read value	
	MSP DEMO200H	DATA0000	MSP data read value	
	L ERROR WAIT	15s	Lamp error detect wait time	
	L ERROR H TIME	1.0s	Lamp error detect time	
	VPC I2C 20H	24	Sync control setting (Only for Ver. 1.8)	

Power off mode settings & Measure against baund setting

22	DENKA PORT	OFF	Power off mode setting	
	DENKA TESTP	00	Power off mode setting	
	DENKA TESTP2	30ms	Power off mode setting	
	FP12TIM	700	Measure against vertical baund	
	REMOCON CODE	000	Received remote control code display	

PUBLIC MODE

1. Outline

The Public mode is designed to limit the functions of LCD TV sets that are set up at hotels, public places (hospitals, for example), shop fronts and similar locations.

Note:

In the Public mode, some user settings may fail to be changed later. The Closed Caption, V-Chip, MTS and some other functions, as well as the volume control must be preset before getting the TV set into the Public mode.

2. Setting procedure

Take the following steps to go to the Public mode.

Call the adjustment process mode, and turn on [PUBLIC MODE]. (Getting started in the Public mode)

On the Public mode setup screen, make necessary settings. (Making settings in the Public mode)

3. Getting started in the Public mode

Hold down the [TV/VIDEO] and [MENU] buttons at once, and press the MAIN POWER switch to power on the TV set.

Then press the [CH▼] and [VOL-] buttons at once to go to the adjustment process mode.

Now press the [MENU] button and select [PUBLIC MODE]. Press the [VOL+] button to turn on the Public mode.

And power off the TV set.

4. Making settings in the Public mode

Before taking the steps below, make sure the TV set is in the Public mode (PUBLIC MODE on).

Hold down the [VOL-] and [CH▼] buttons at once, and press the MAIN POWER switch to power on the TV set again. The PUBLIC MODE screen shows up.

PUBLIC MODE	
MAXIMUM VOLUME	[60]
VOLUME FIXED	[VARIABLE]
REMOTE CONTROL	[RESPOND]
USER CONTROL	[RESPOND]
ON SCREEN DISPLAY	[YES]
AV1 INPUT	[NORMAL]
RESET	
ENTER	

Using the [CH▼] or [CH▲] button, select an item.

Using the [VOL-] or [VOL+] button, change the setting.

Note:

Finally be sure to select [ENTER] and press the [VOL-] or [VOL+] button to save the new setting.

Item	Default	Setting	Function
MAXIMUM VOLUME	60	1~60	Sets the highest sound volume level. (The volume level is expressed in digital form only.)
VOLUME FIXED	VARIABLE	VARIABLE	Makes the sound volume adjustable.
		FIXED	Keeps the sound volume fixed. (The sound volume is fixed at the then level. The Volume and Mute characters are not displayed onscreen.)
REMOTE CONTROL	RESPOND	RESPOND	Activates the remote controller.
		NO RESPOND	Deactivates the remote controller. (The buttons on the TV set are operative.)
USER CONTROL	RESPOND	RESPOND	Activates the buttons on the TV set.
		NO RESPOND	Deactivates the buttons on the TV set. (The remote controller alone is operative.)
ON SCREEN DISPLAY	YES	YES	Activates the onscreen display.
		NO	Deactivates the onscreen display.
AV1 INPUT	NORMAL	NORMAL	Usual operation.
		START	Enters the AV1 mode when powered on. (Switchable between TV and VIDEO)
		AV1 FIXED	Keeps the TV set fixed at the AV1 mode. (Unswitchable between TV and VIDEO)
RESET			Returns all the settings to their defaults.
ENTER			Saves new settings.

5. Quitting the Public mode

Hold down the [TV/VIDEO] and [MENU] buttons at once, and press the MAIN POWER switch to power on the TV set.

Then press the [CH▼] and [VOL-] buttons at once to go to the adjustment process mode.

Now press the [MENU] button and select [PUBLIC MODE]. Press the [VOL+] button to turn off the Public mode.

Finally power off the TV set.

TROUBLE SHOOTING TABLE

No Power (Power LED indicator still in red)

Go to the adjustment process mode.

1 Δ MODEL E1U
INCH SIZE 20
SYSTEM N358
NTSC PWM FREQ OCO
PAL PWM FREQ OBD
NTSC PWM DUTY 0
PAL PWM DUTY 0
TV GAIN OFF
ERROR NO RESET 5
PUBLIC MODE OFF
V-CHIP 1
CANADIAN VCHIP OFF
E1UVER 1.xx

Move the cursor to ERROR NO RESET and click on it (to reset to zero).

Turn off the power.

Is the power turned on again?

No

Check the following points.

- (1) Backlight lamp
- (2) Inverter circuit (inverter PWB and main PWB)F6700, F6701, F6702, F6703, F6704, D6700, D6701, Q6700, Q6701, Q6702, Q6703, Q6704, Q6705, Q6706, Q6707, Q6708, Q6709, Q6710, Q6711, Q6712, Q6713, Q6714 and their peripheral parts as well as pin (34) of IC1201
- (3) Lamp error detection circuit (terminal PWB and main PWB)D3600, D3601, D3602, D3603, D3604, D3605, D3606, D3607, D3608, Q3600, Q3601, Q3602, Q3603, Q3604 and their peripheral parts as well as pin (42) of IC2001

Note:

This model is equipped with the lamp error detection function that detects the current flowing into the fluorescent lamp and protects the backlight lamp drive circuit. If a lamp error is detected, the microprocessor interrupts the unit and the ERROR NO RESET setting will go up. When the ERROR NO RESET setting has reached "5", the microprocessor turns and keeps off the unit's power. To resume the power, take the above procedure to clear the ERROR NO RESET setting.

No or Wrong Picture

Does the IC801 test pattern appear properly?

No

Does the IC1201 test pattern appear properly?

Yes

Check the IC801 signal output line, IC801 itself and its peripheral circuits.

No

Are the waveforms at pins (10), (11), (13), (15) and (17) of IC1201 as specified?

Yes

Check IC1201 and its peripheral circuits as well as the LCD panel voltage and waveform.

No

Check the related lines, IC801 itself and its peripheral circuits.

Are the waveforms at the signal input pins of IC801 as specified? TV/Composite ... Pin (73) S Video ... Pins (71) and (72) Component ... Pins (4), (5), (6) and (75)

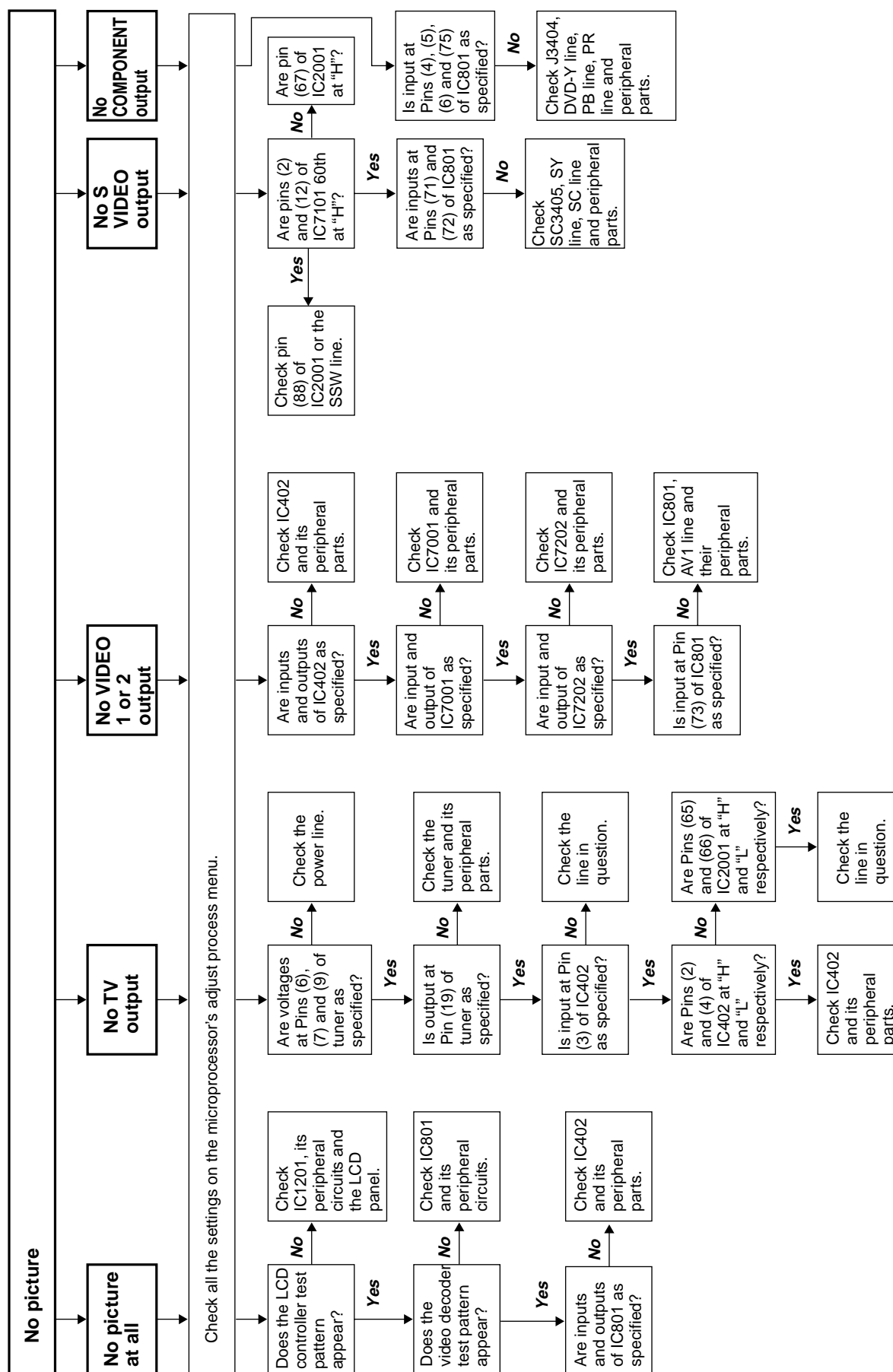
Yes

Check the IC801 signal input line.

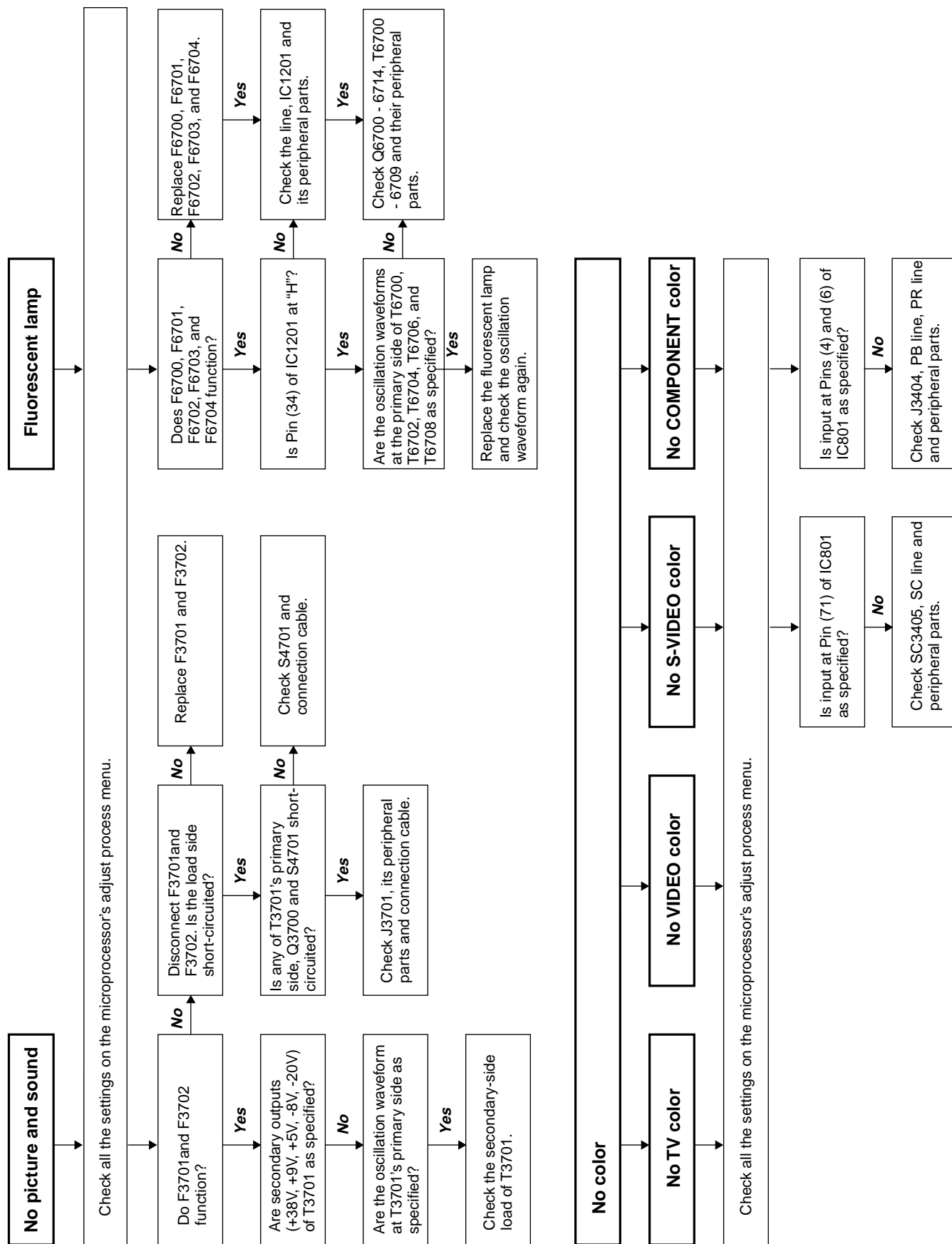
No

Check IC801 and its peripheral circuits.

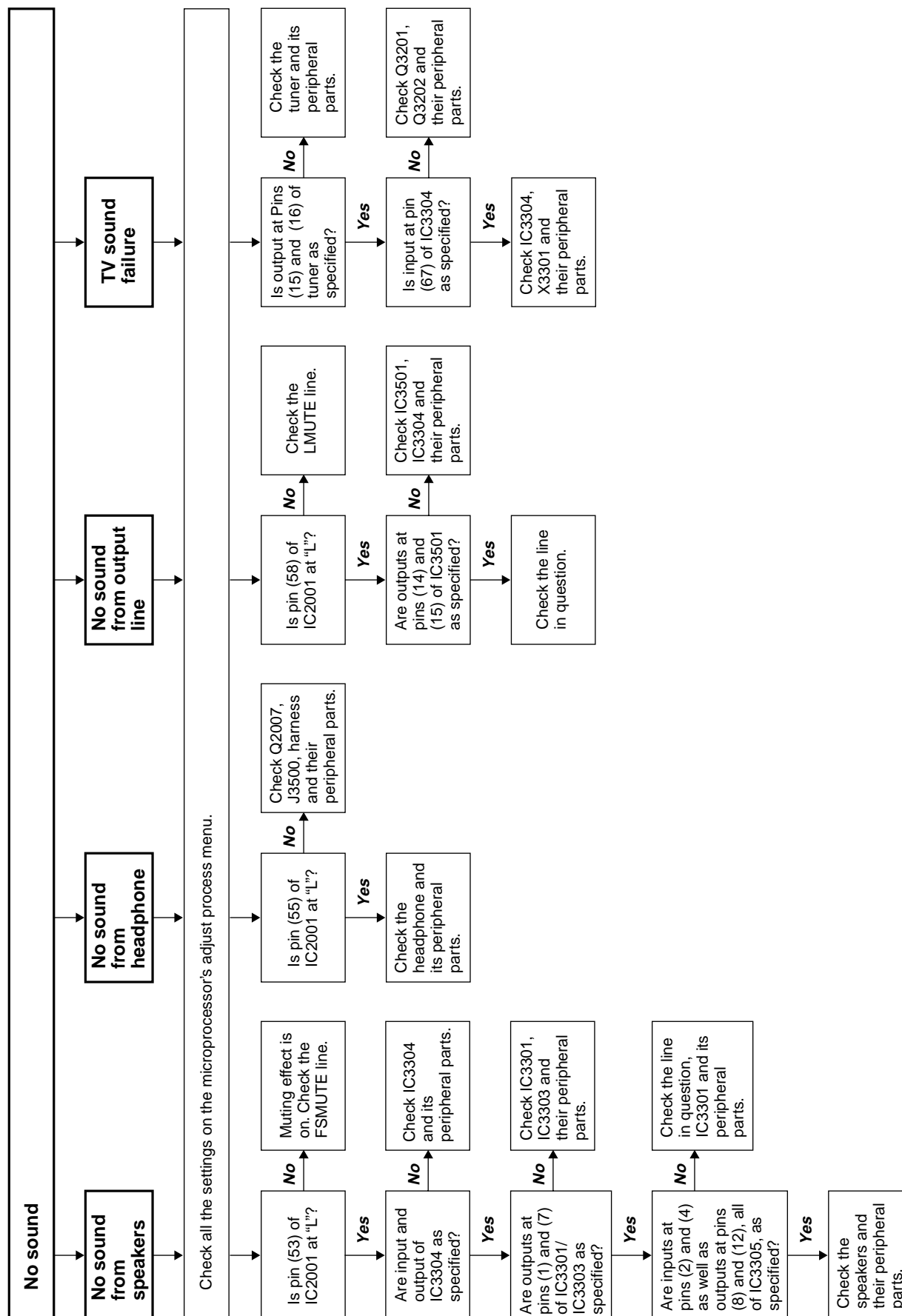
TROUBLE SHOOTING TABLE (Continued)



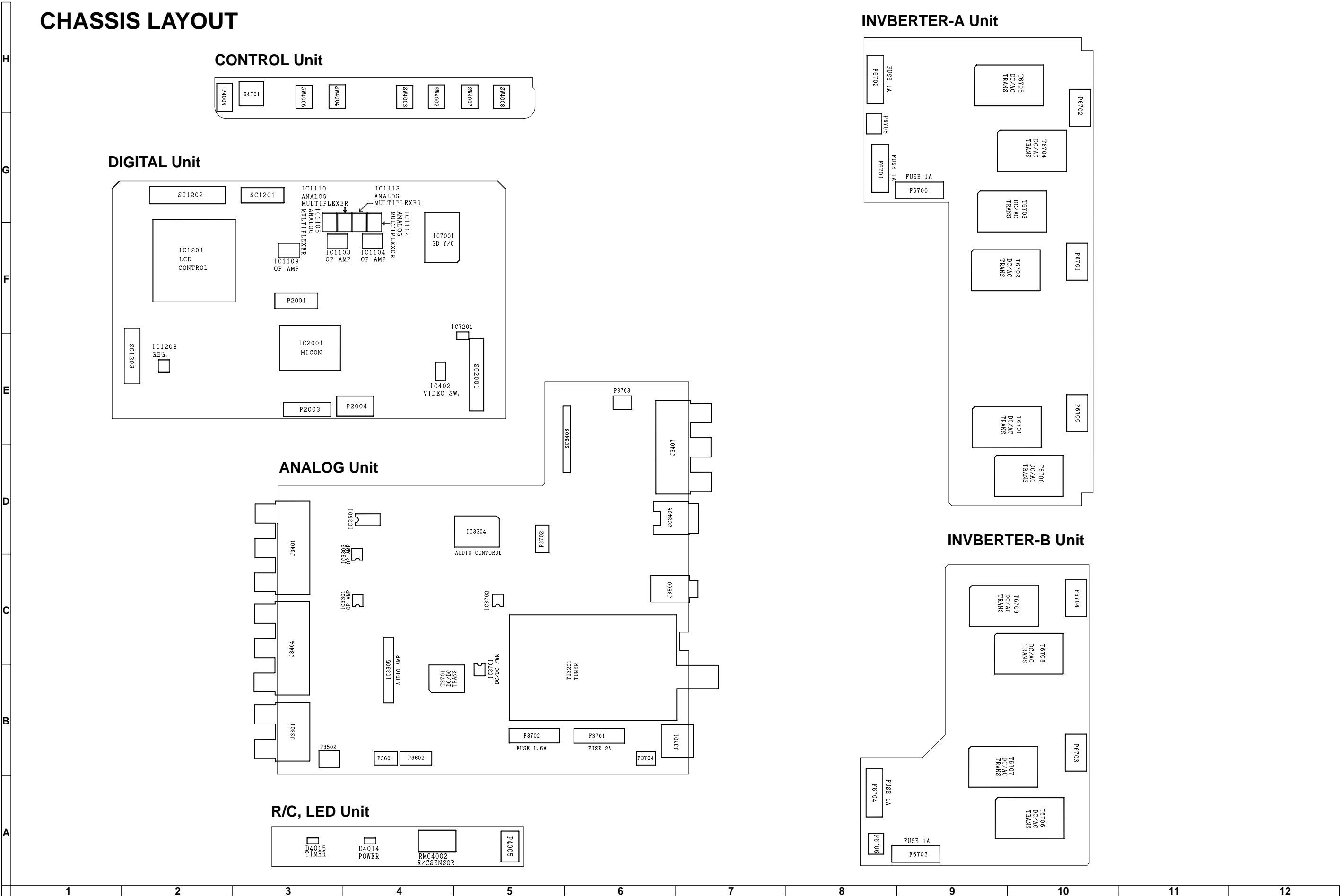
TROUBLE SHOOTING TABLE (Continued)



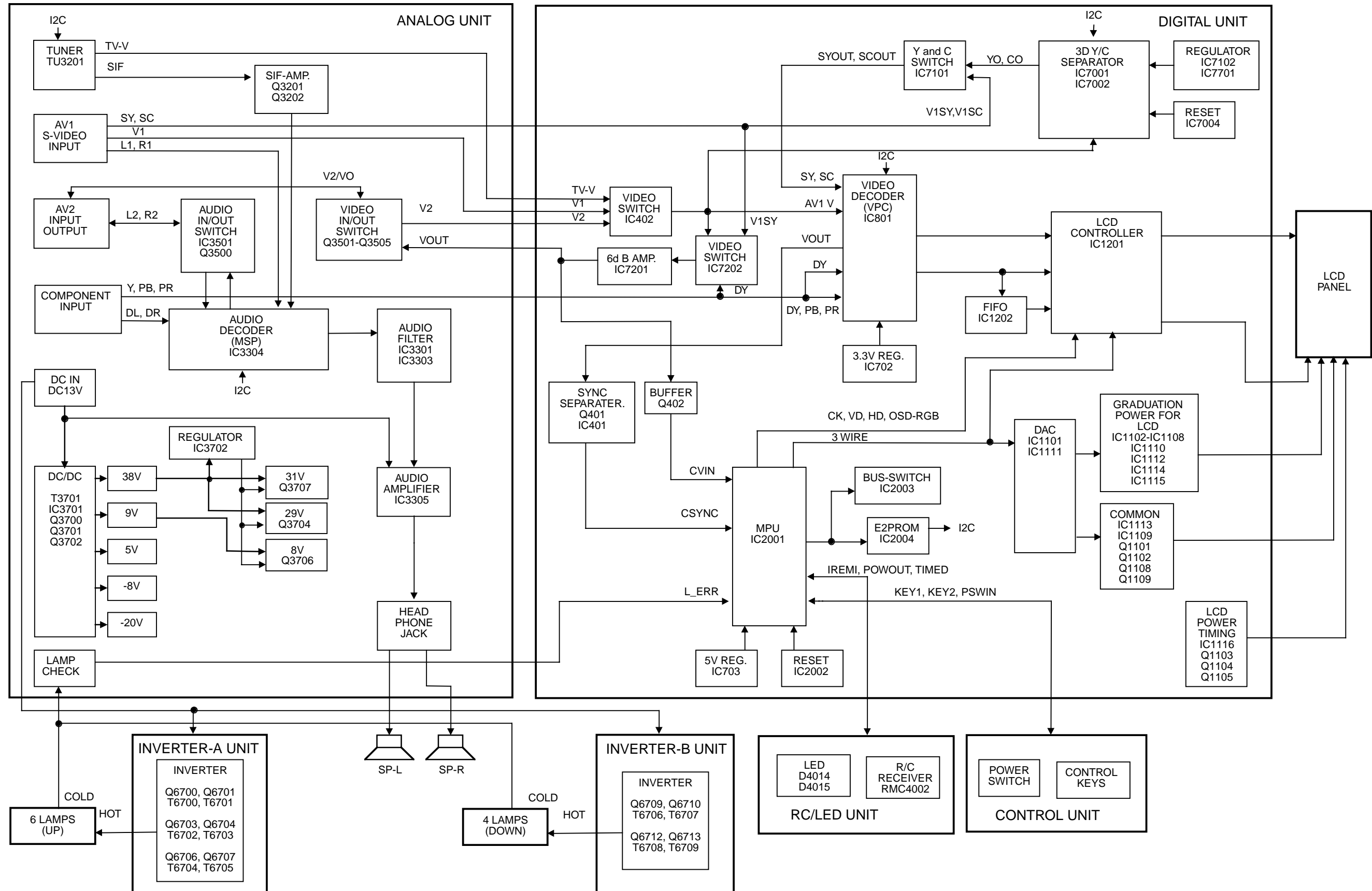
TROUBLE SHOOTING TABLE (Continued)



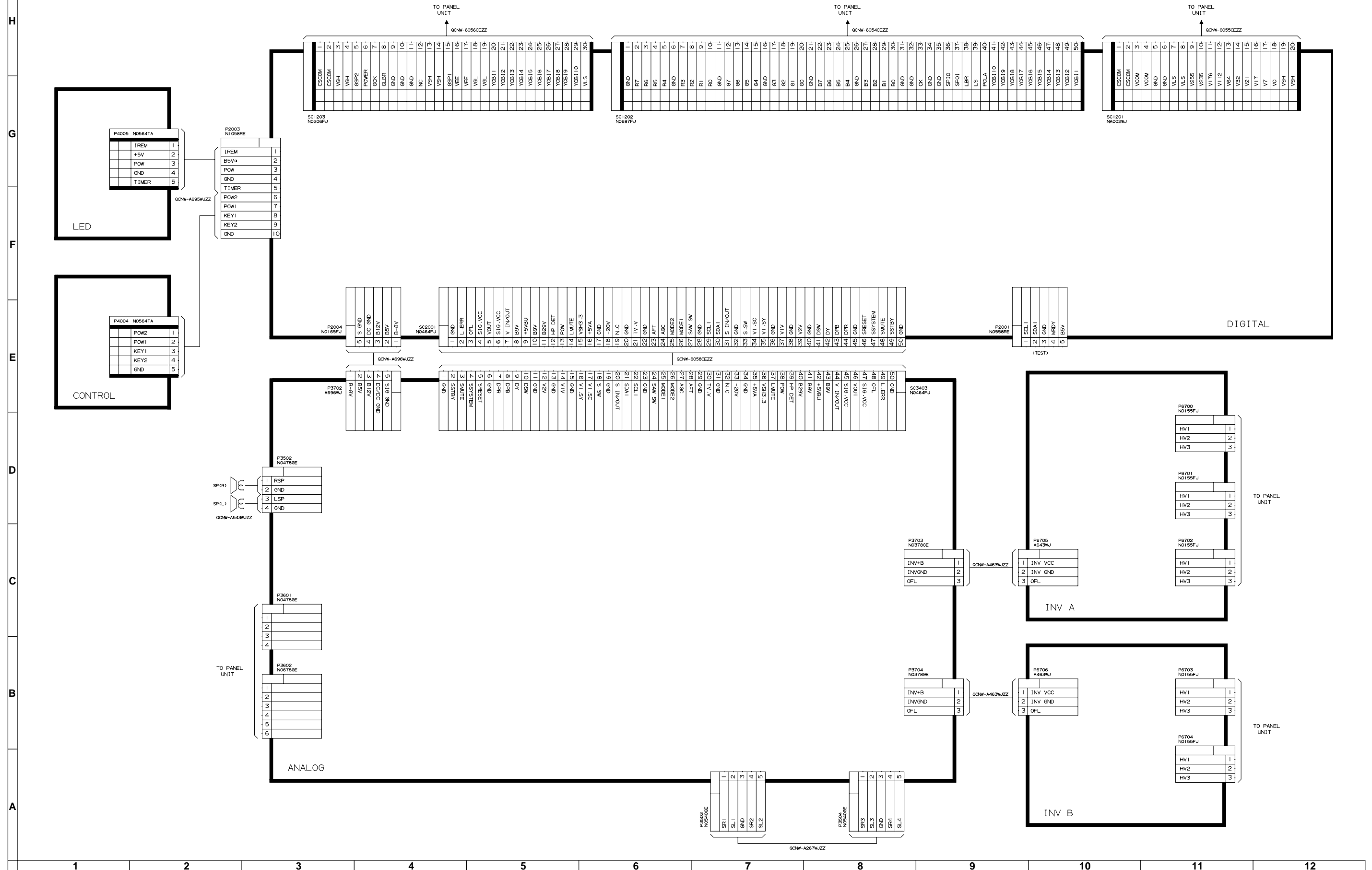
CHASSIS LAYOUT



BLOCK DIAGRAM



OVERALL WIRING DIAGRAM



DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 120V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted.
(K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted.
(J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/16W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.

©: Solid Ⓢ: Cement
Ⓢ: Oxide Film ①: Special
Ⓝ: Metal Coating

CAPACITOR

1. All capacitors are μF, unless otherwise noted.
(P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.
(ML): Mylar (TA): Tantalum
(PF): Polypro Film (ST): Styrol

CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "⚠" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

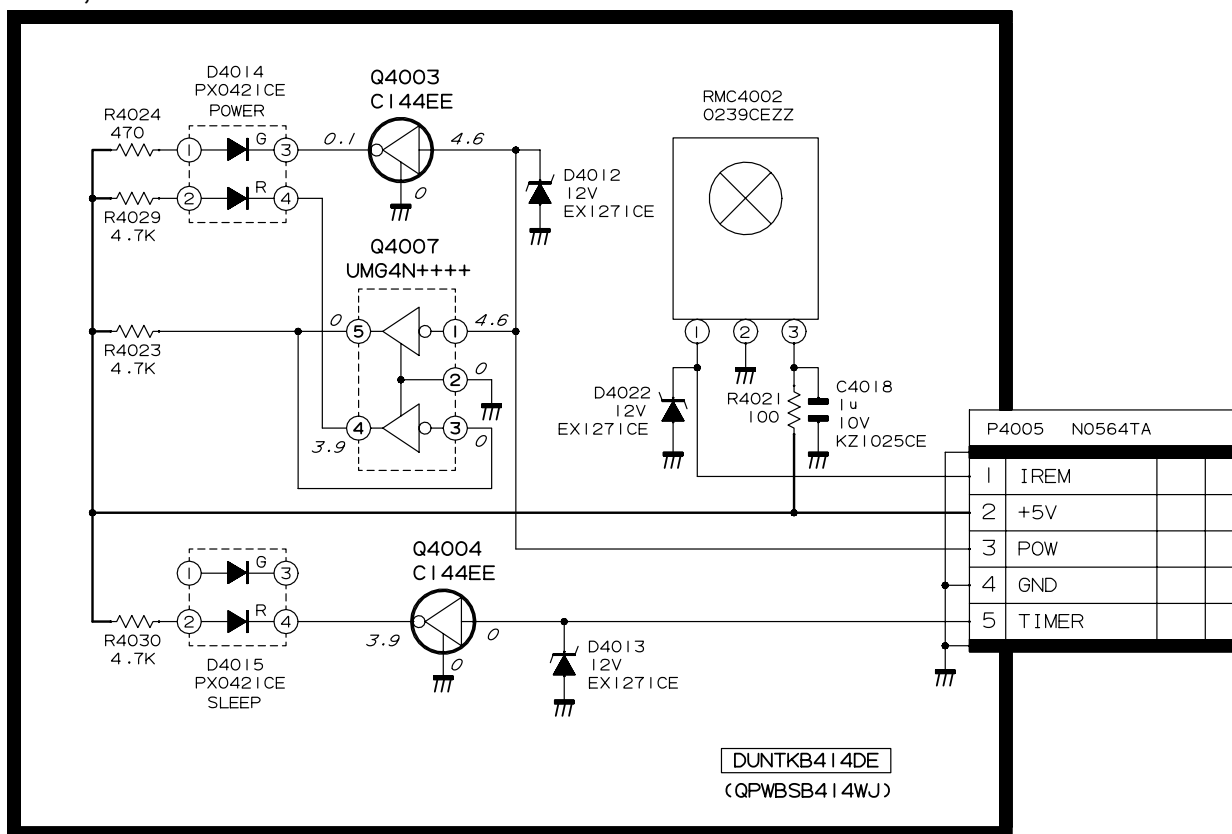
AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES "⚠" () SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.
NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

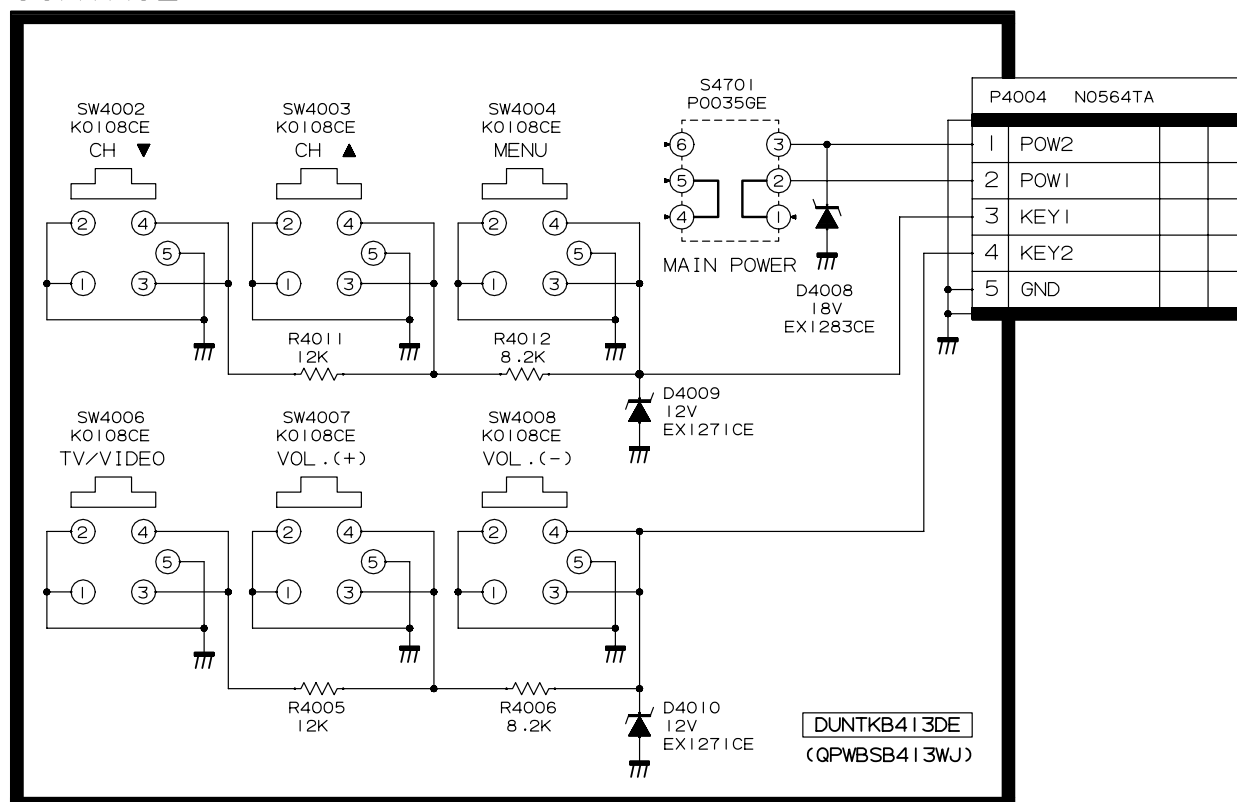
SCHEMATIC DIAGRAM

■R/C, LED and CONTROL Unit

R/C, LED

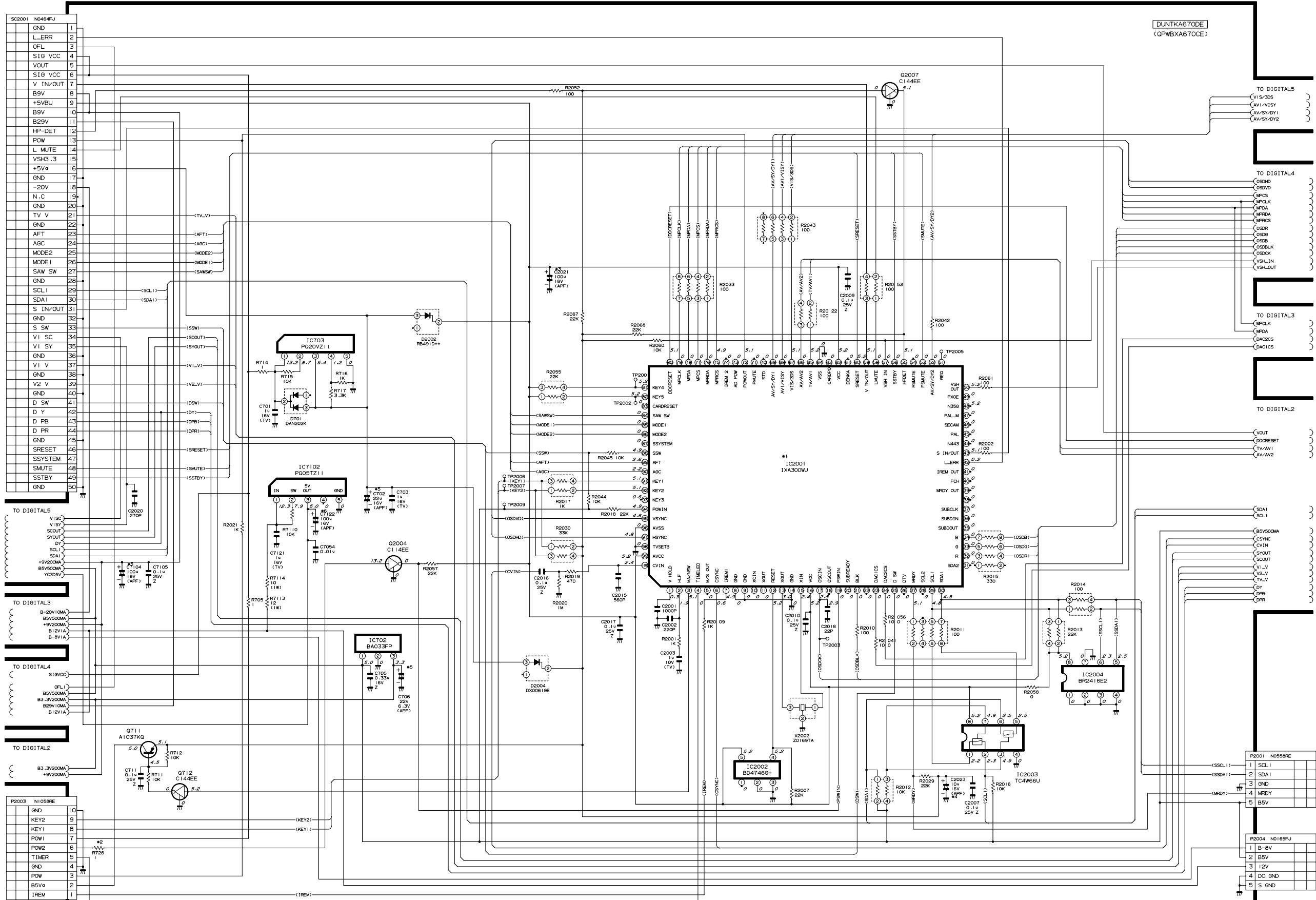


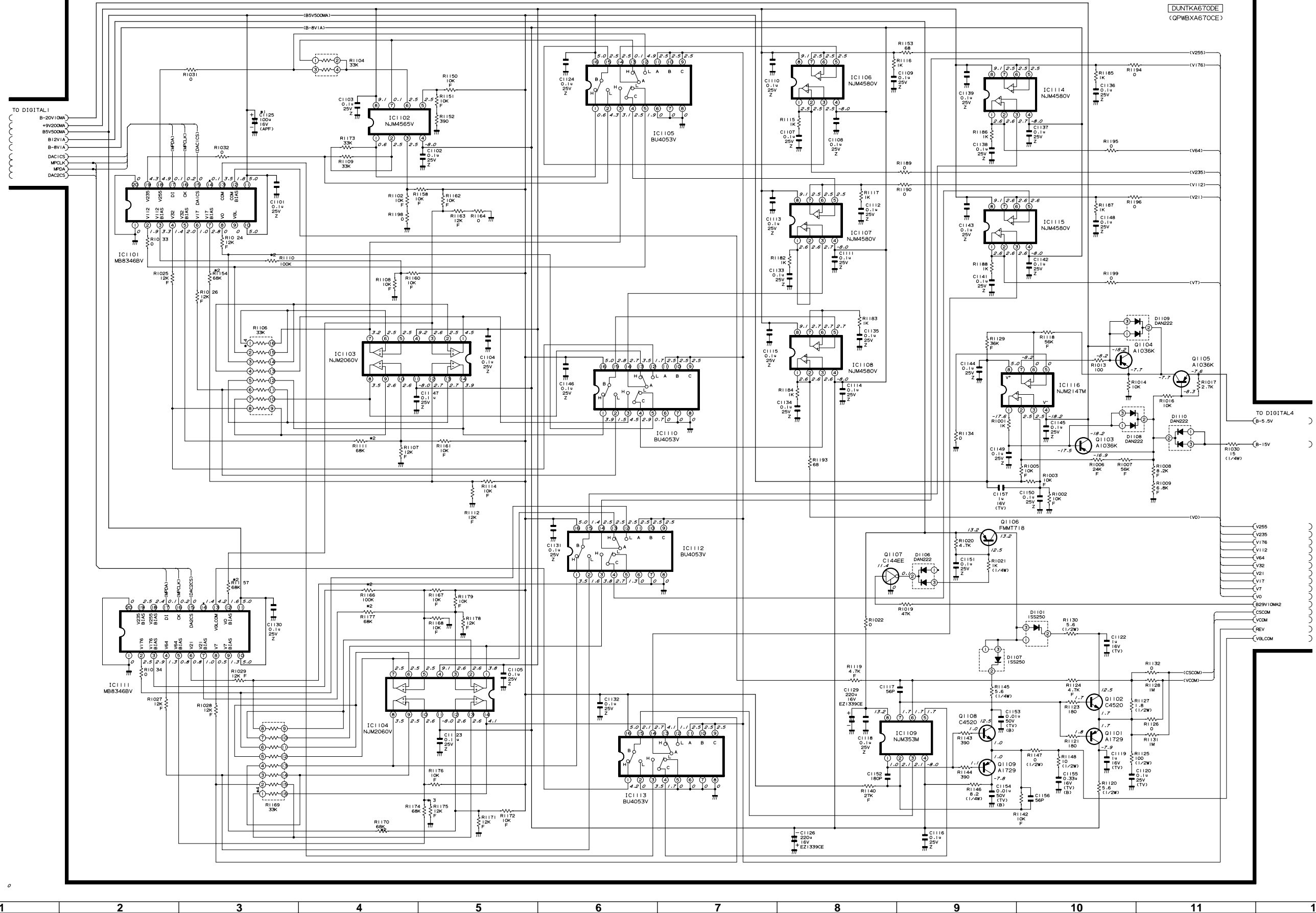
CONTROL



DIGITAL Unit-1/5

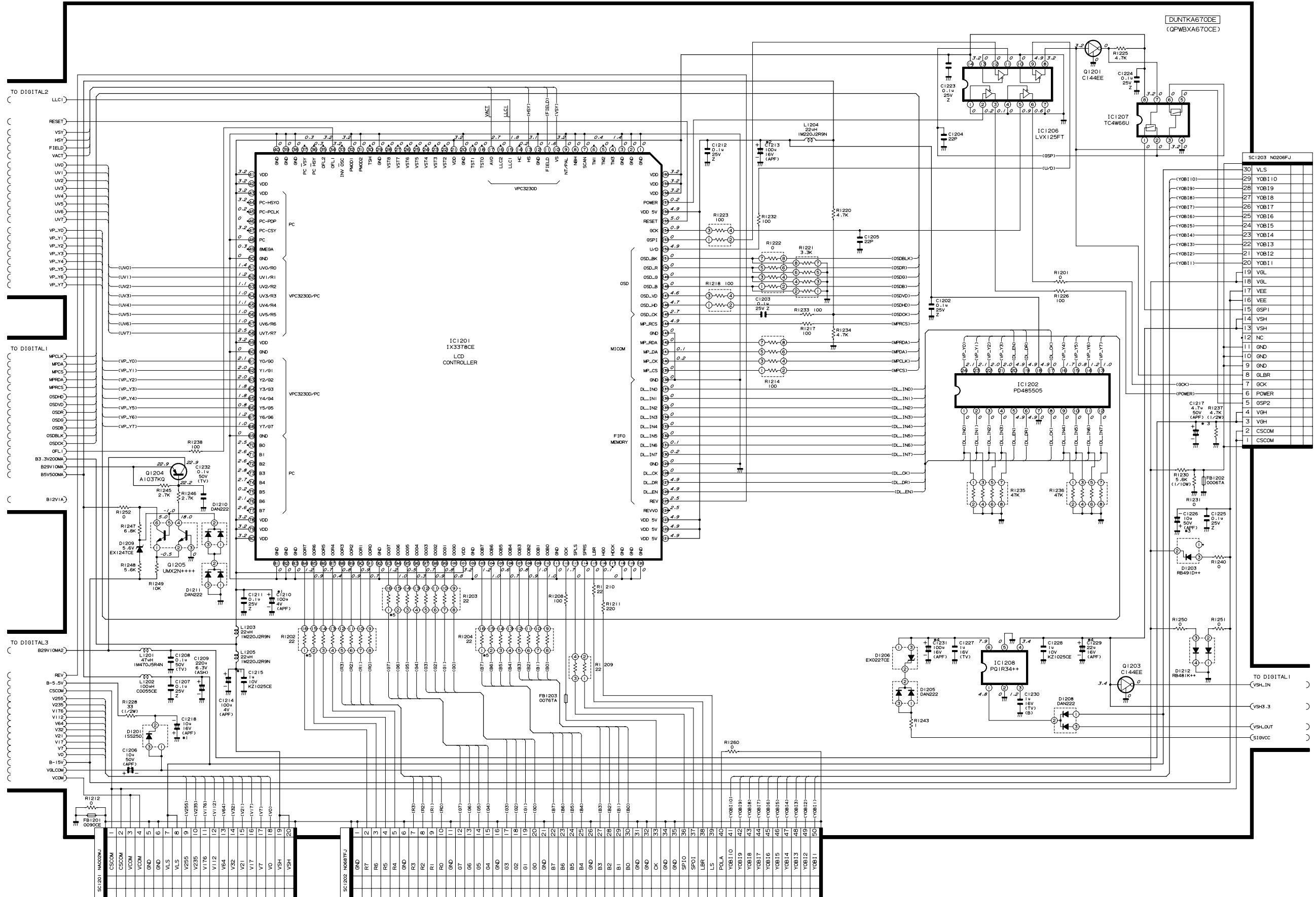
DIGITAL I





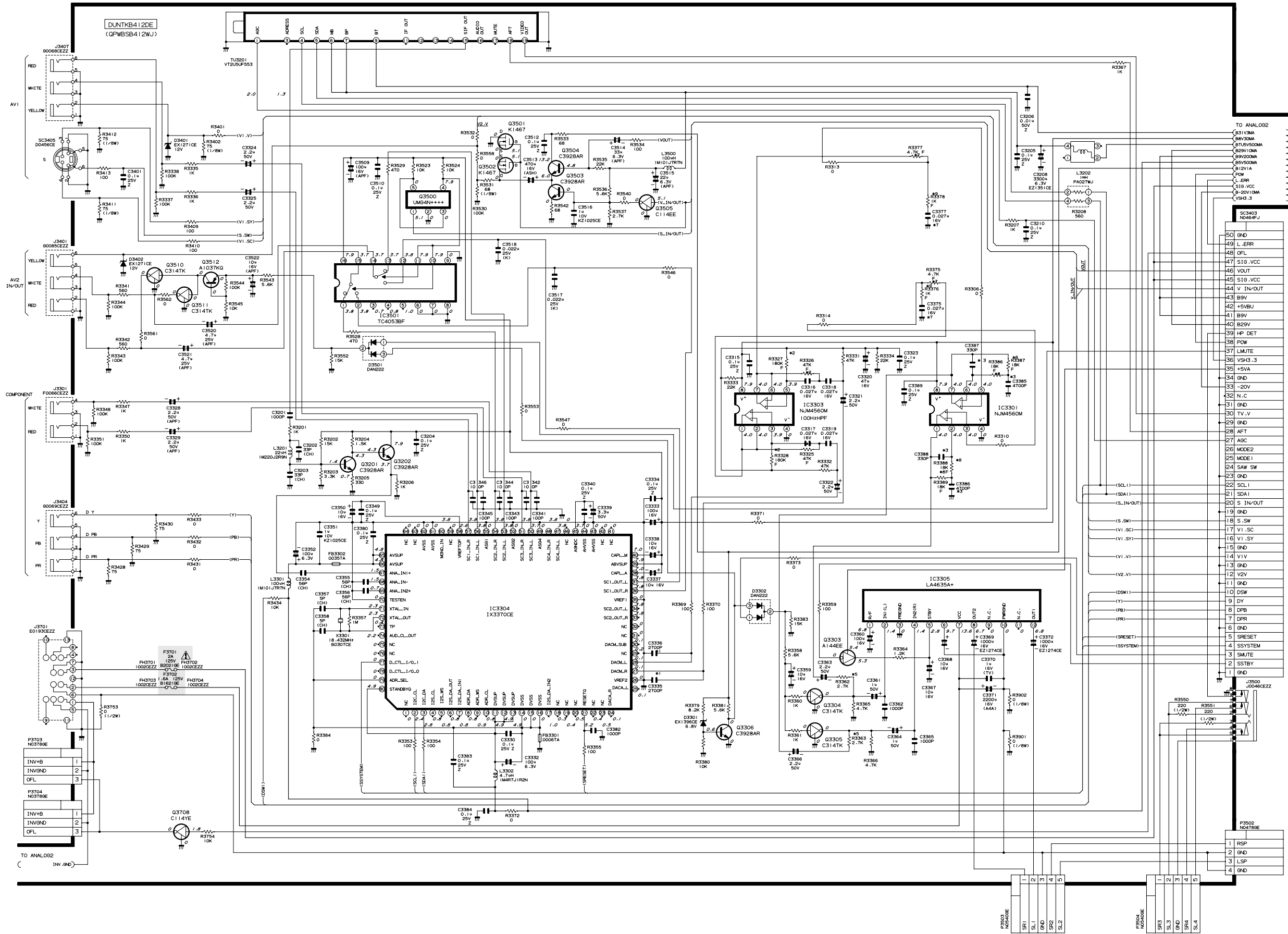
DIGITAL Unit-4/5

DIGITAL 4



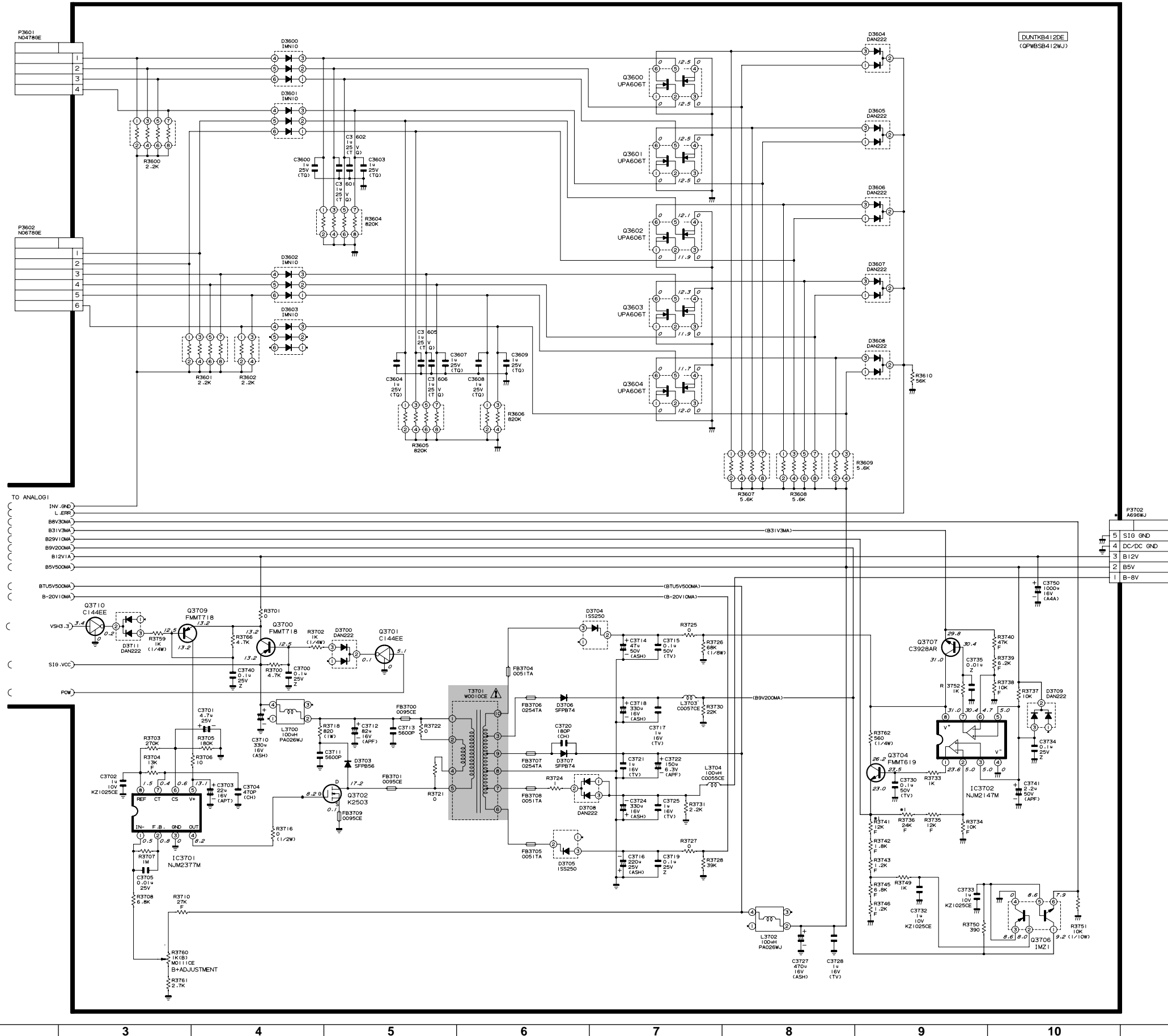
ANALOG Unit-1/2

ANALOG 1



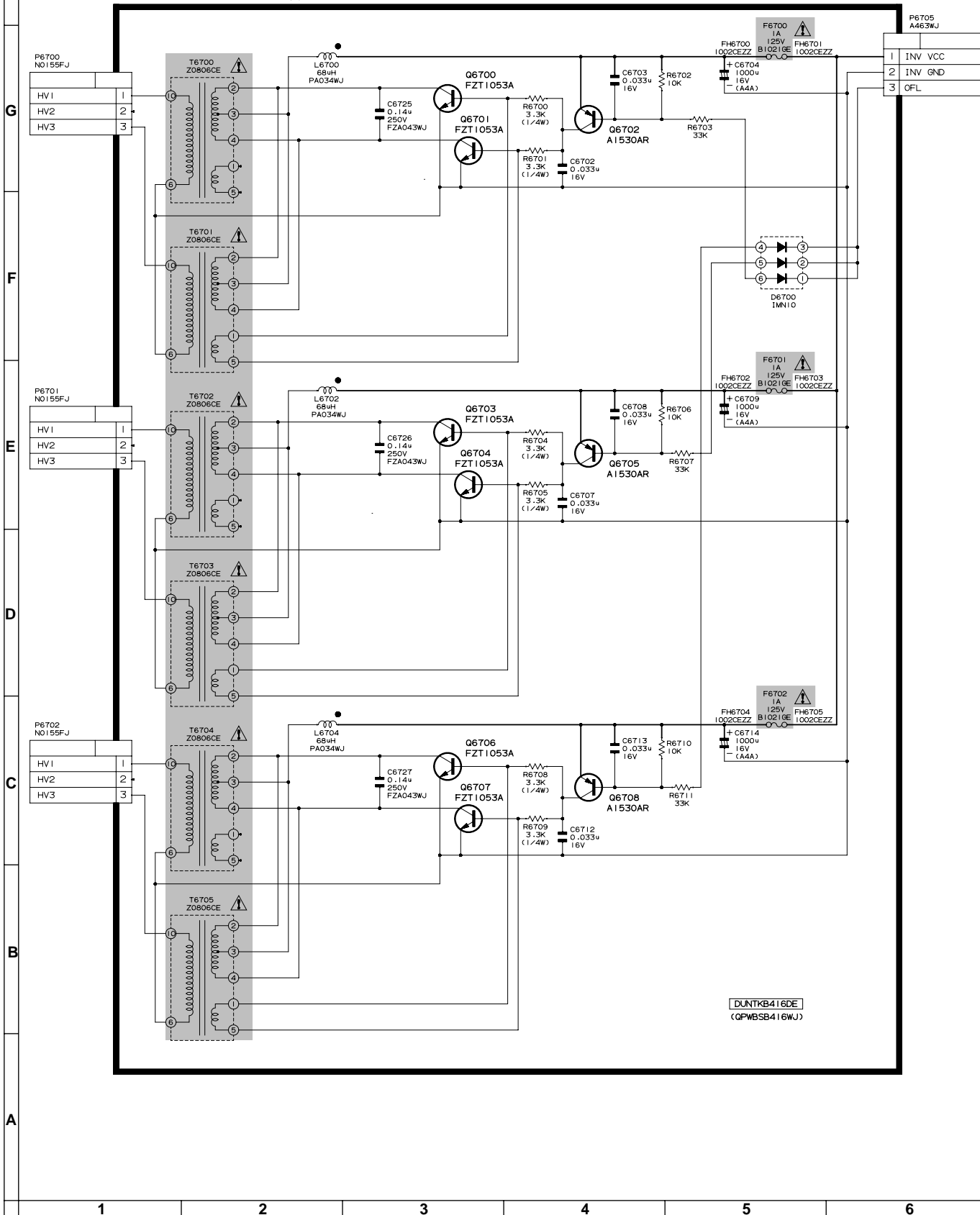
■ ANALOG Unit-2/2

ANALOG 2

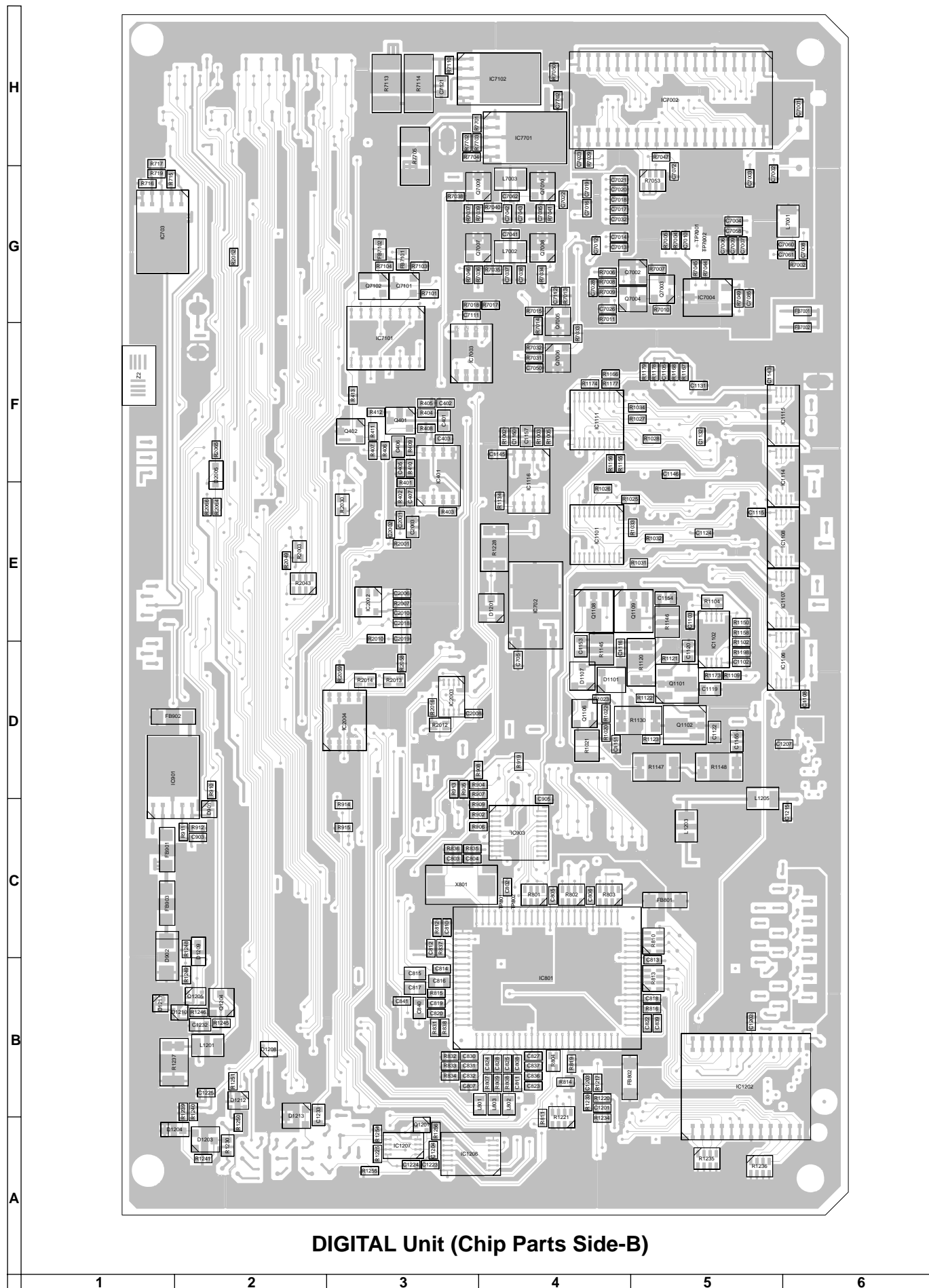


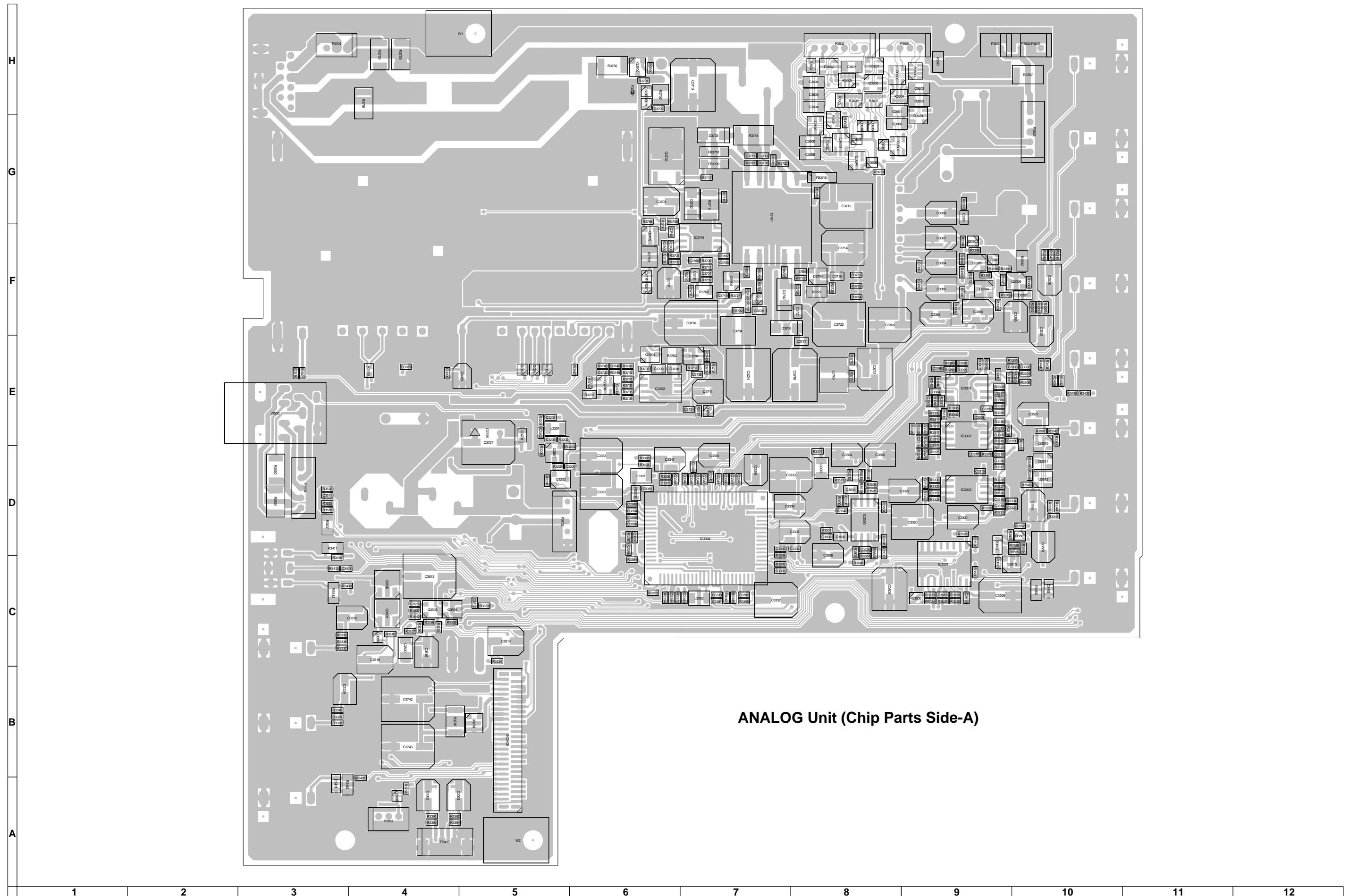
INVERTER-A Unit

INVERTER A (UP)

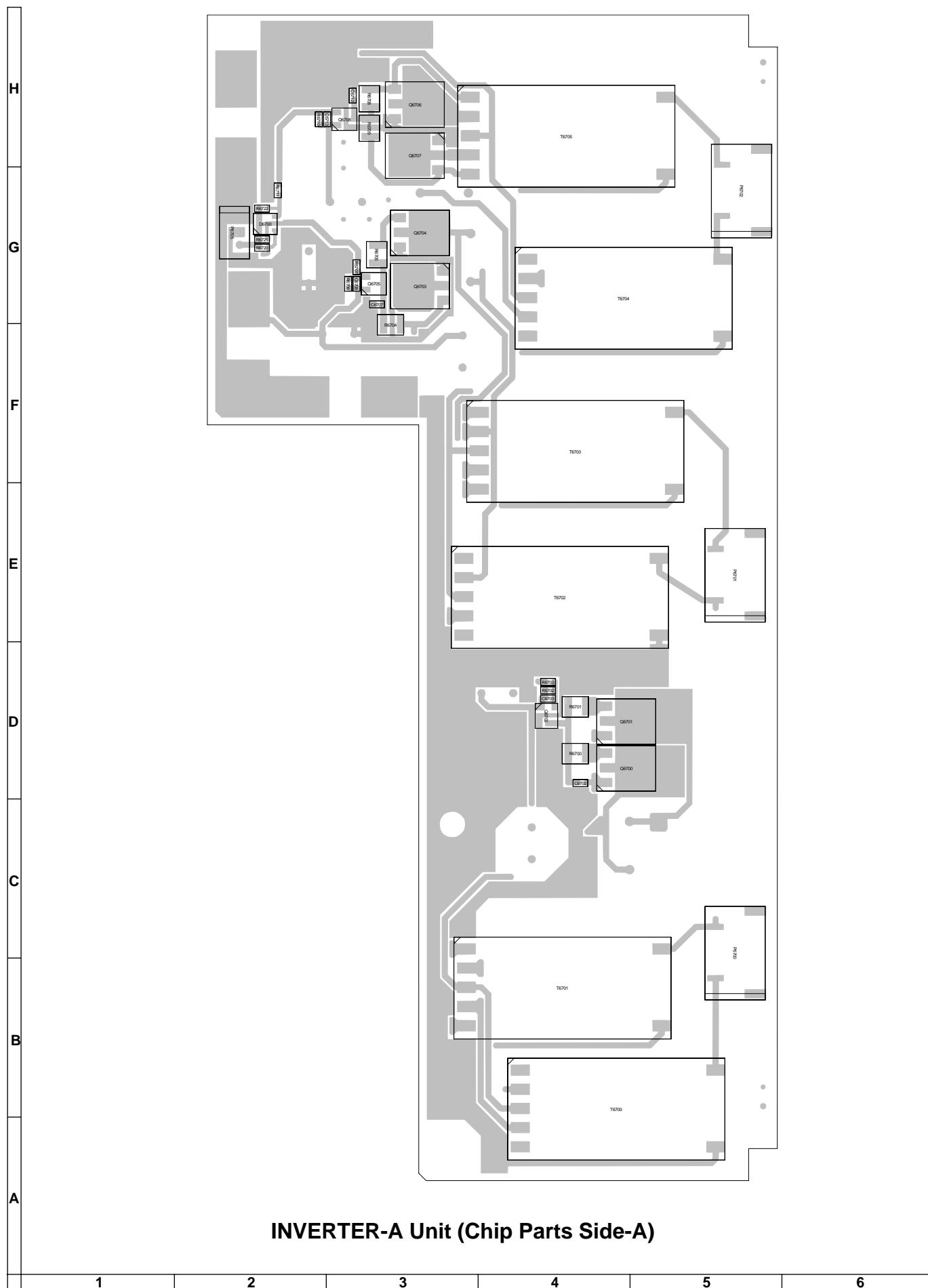






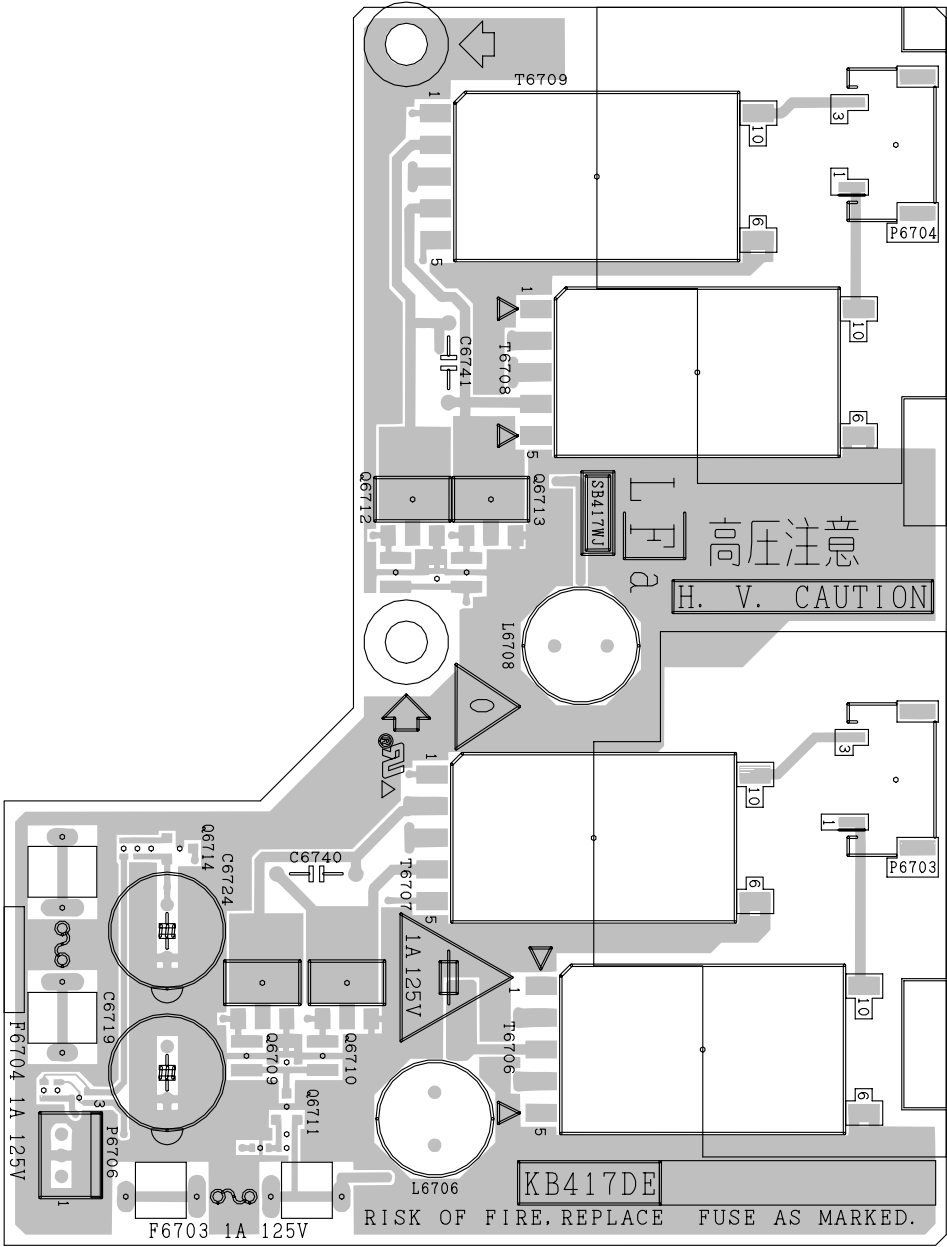






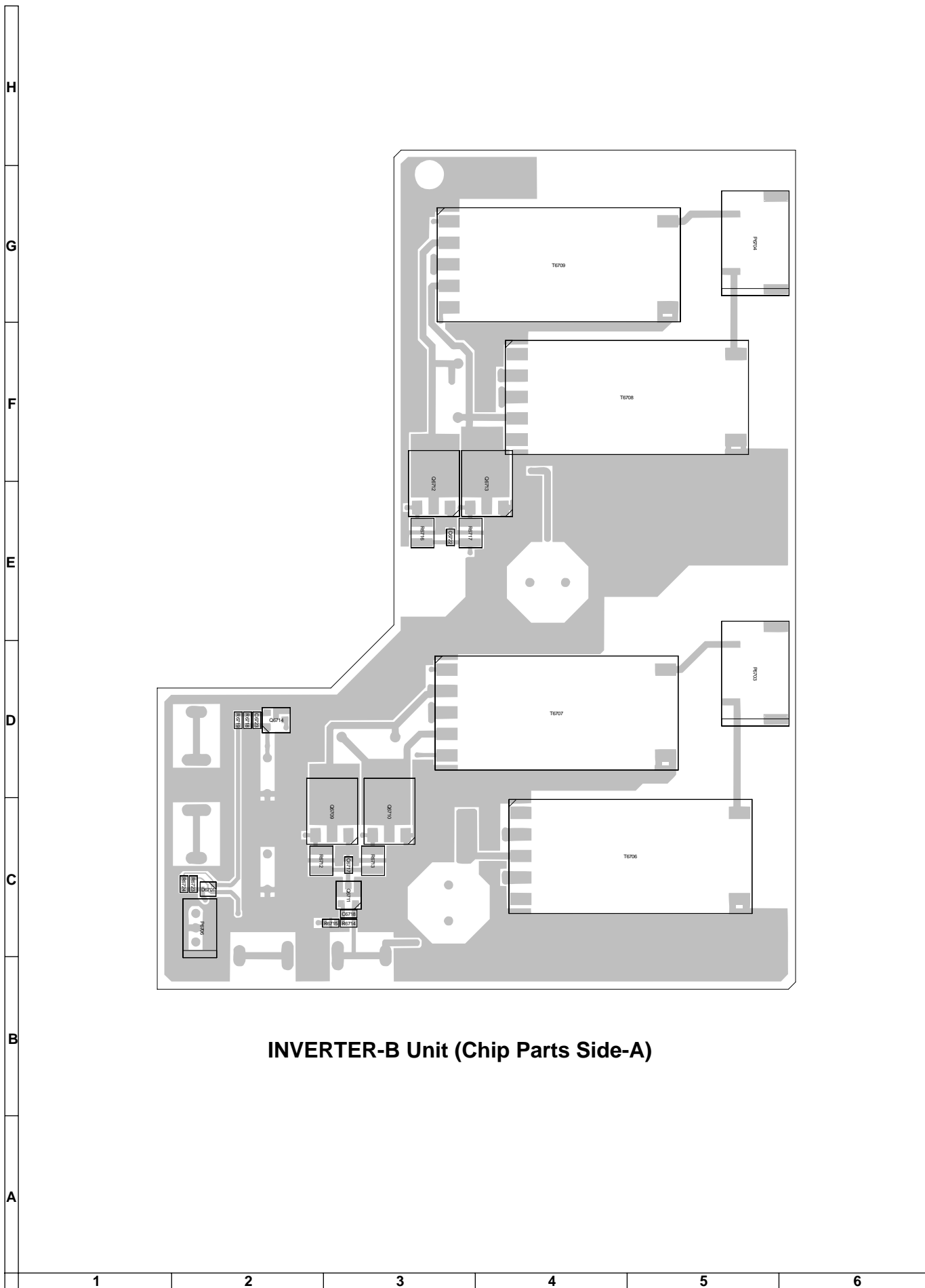
INVERTER-A Unit (Chip Parts Side-A)

H
G
F
E
D
C
B
A




INVERTER-B Unit (Side-A)

1 2 3 4 5 6



PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)


DUNTKA670FE29	—	DIGITAL Unit	—
DUNTKB412DE03	—	ANALOG Unit	—
DUNTKB413DE03	—	CONTROL Unit	—
DUNTKB414DE03	—	R/C, LED Unit	—
DUNTKB416DE01	—	INVERTER-A Unit	—
DUNTKB417DE01	—	INVERTER-B Unit	—

LCD PANEL

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.
RLCDA014WJZZ J 20" LCD Panel Unit DT

LISTE DES PIECES

CHANGE DES PIECES

Les pièces de rechange qui présentent ces caractéristiques spéciales de sécurité, sont identifiées dans ce manuel : les pièces électriques qui présentent ces particularités, sont repérées par la marque  et sont hachurées dans les listes de pièces et dans les diagrammes schématisés. La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité, peut provoquer une électrocution, un incendie ou tout autre sinistre.

"COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivants.

1. NUMERO DU MODELE
2. NO. DE REF
3. NO. DE PIECE
4. DESCRIPTION

in **CANADA**: Contact SHARP Electronics of Canada Limited
Phone (416) 890-2100

★MARQUE: SECTION LIVRAISON DES PIECES DE RECHANGE

Ref. No.	Part No.	★	Description	Code
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DUNTKA670FE29
DIGITAL UNIT

INTEGRATED CIRCUITS

IC401	VHiBA7046F/-1	J	BA7046F	AF
IC401	VHiBA7046F/-1Y	J	BA7046F	AF
IC402	VHiNJM2235V-1Y	J	NJM2235V	AE
IC702	VHiBA033FP/-1Y	J	BA033FP-E2	AG
IC703	VHiPQ20VZ11-1Y	J	PQ20VZ11	AG
IC801	VHiVPC3230D1EQ	J	VPC3230D-QA-B3	BD
IC1101	VHiMB8346BV-1Y	J	MB88346BPFV	AN
IC1102	VHiNJM4565V-1Y	J	NJM4565V	AF
IC1103	VHiNJM2060V-1Y	J	NJM2060V	AF
IC1104	VHiNJM2060V-1Y	J	NJM2060V	AF
IC1105	VHiBU4053V/-1Y	J	BU4053BCFV-E2	AE
IC1106	VHiNJM4580V-1Y	J	NJM4580V	AE
IC1107	VHiNJM4580V-1Y	J	NJM4580V	AE
IC1108	VHiNJM4580V-1Y	J	NJM4580V	AE
IC1109	VHiNJM353M/-1Y	J	NJM353M	AG
IC1110	VHiBU4053V/-1Y	J	BU4053BCFV-E2	AE
IC1111	VHiMB8346BV-1Y	J	MB88346BPFV	AN
IC1112	VHiBU4053V/-1Y	J	BU4053BCFV-E2	AE
IC1113	VHiBU4053V/-1Y	J	BU4053BCFV-E2	AE
IC1114	VHiNJM4580V-1Y	J	NJM4580V	AE
IC1115	VHiNJM4580V-1Y	J	NJM4580V	AE
IC1116	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF
IC1201	RH-iX3378CEN1Q	J	LR38815	AY
IC1202	VHiPD485505-2Y	J	UPD485505G-25	AY
IC1206	VHiLVX125FT-1Y	J	TC74LVX125FT	AG
IC1207	VHiTC4W66U/-1Y	J	TC4W66FU	AE
IC1208	VHiPQ1R34+-1Y	J	PQ1R34	AE
IC2001	RH-iXA300WJZZQ	J	M306VOME-172FP	AZ
IC2002	VHiBD4746G+-1Y	J	BD4746G-TR	AD
IC2003	VHiTC4W66U/-1Y	J	TC4W66FU	AE
IC2004	VHiBR2416E2-1Y	J	BR24C16F	AK
IC7001	VHiPD64082/-1S	J	UPD64082GF-3BA	BC
IC7002	RH-iX3420CEZZY	J	MSM5416258B-28	AT
IC7003	VHiTK15420/-1Y	J	TK15420MTL	AG
IC7004	VHiPST600IM-1Y	J	IC-PST600IMT	AE
IC7101	VHiNJM2283F-1Y	J	NJM2283M	AF
IC7102	VHiPQ05TZ11-1Y	J	PQ05TZ11	AG

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA670FE29									
DIGITAL UNIT (Continued)									
IC7201	VHIMM1031XM-1Y	J	MM1031XMR	AF	L803	VP-9N3R3KR46NY	J	Peaking 3.3μH	AC
IC7202	VHINJM2235V-1Y	J	NJM2235V	AE	L804	RCILC0055CEZZY	J	Coil	AD
IC7701	VHIPQ20VZ11-1Y	J	PQ20VZ11	AG	L805	RCILC0055CEZZY	J	Coil	AD
TRANSISTORS					L1201	VP-1M470J5R4NY	J	Peaking 47μH	AC
Q401	VS2SC3928AR-1Y	J	2SC3928AR	AB	L1202	RCILC0055CEZZY	J	Coil	AD
Q402	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	L1203	VP-1M220J2R9NY	J	Peaking 22μH	AB
Q711	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	L1204	VP-1M220J2R9NY	J	Peaking 22μH	AB
Q712	VSDTC144EE/-1Y	J	DTC144EE	AA	L1205	VP-1M220J2R9NY	J	Peaking 22μH	AB
Q1101	VS2SA1729//1Y	J	2SA1729	AF	L7001	VP-1M4R7J1R2NY	J	Peaking 4.7μH	AB
Q1102	VS2SC4520//1Y	J	2SC4520	AE	L7002	VP-1M220J2R9NY	J	Peaking 22μH	AB
Q1103	VS2SA1036K/-1Y	J	2SA1036K	AC	L7003	VP-1M220J2R9NY	J	Peaking 22μH	AB
Q1104	VS2SA1036K/-1Y	J	2SA1036K	AC	CAPACITORS				
Q1105	VS2SA1036K/-1Y	J	2SA1036K	AC	C401	VCKYTV1AB105K	J	1 10V Ceramic	AD
Q1106	VSFMMT718/-1Y	J	FMMT718	AE	C401	VCKYTV1AB105KY	J	1 10V Ceramic	AC
Q1107	VSDTC144EE/-1Y	J	DTC144EE	AA	C402	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
Q1108	VS2SC4520//1Y	J	2SC4520	AE	C403	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
Q1109	VS2SA1729//1Y	J	2SA1729	AF	C404	VCEAPF0JW476MY	J	47 6.3V Electrolytic	AB
Q1201	VSDTC144EE/-1Y	J	DTC144EE	AA	C405	VCKYCY1HB222KY	J	2200p 50V Ceramic	AA
Q1203	VSDTC144EE/-1Y	J	DTC144EE	AA	C406	VCKYTV1AB105KY	J	1 10V Ceramic	AC
Q1204	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C407	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
Q1205	VSUMX2N++++1Y	J	UMX2N++++	AB	C408	VCKYTV1AB105KY	J	1 10V Ceramic	AC
Q2004	VSDTC114EE/-1Y	J	DTC144EE	AB	C409	VCKYTV1AB105KY	J	1 10V Ceramic	AC
Q2007	VSDTC144EE/-1Y	J	DTC144EE	AA	C410	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
Q7001	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C411	VCKYTV1AB105KY	J	1 10V Ceramic	AC
Q7002	VS2SC2412KQ-1Y	J	2SC2412KQ	AA	C701	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
Q7003	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C702	VCEAPF1CN226MY	J	22 16V Electrolytic	AD
Q7004	VS2SC2412KQ-1Y	J	2SC2412KQ	AA	C703	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
Q7005	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C705	VCKYCY1CF334ZY	J	0.33 16V Ceramic	AB
Q7006	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C706	VCEAPF0JN226MY	J	22 6.3V Electrolytic	AD
Q7007	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C711	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
Q7008	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C801	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
Q7009	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C802	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
Q7010	VS2SA1037KQ-1Y	J	2SA1037KQ	AA	C803	VCCCCY1HH7R0DY	J	7p 50V Ceramic	AA
Q7101	VS2SC3928AR-1Y	J	2SC3928AR	AB	C804	VCCCCY1HH7R0DY	J	7p 50V Ceramic	AA
Q7102	VS2SC3928AR-1Y	J	2SC3928AR	AB	C805	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
DIODES					C806	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D701	VHDDAN202K/-1Y	J	Diode	AB	C807	VCKYCY1HB331KY	J	330p 50V Ceramic	AA
D1101	VHD1SS250//1EY	J	Diode	AB	C808	VCKYCY1HB331KY	J	330p 50V Ceramic	AA
D1106	VHDDAN222/-1Y	J	Diode	AA	C809	VCEAPF1CN107MY	J	100 16V Electrolytic	AD
D1107	VHD1SS250//1EY	J	Diode	AB	C810	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
D1108	VHDDAN222/-1Y	J	Diode	AA	C811	VCKYCY1HB331KY	J	330p 50V Ceramic	AA
D1109	VHDDAN222/-1Y	J	Diode	AA	C812	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D1110	VHDDAN222/-1Y	J	Diode	AA	C813	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D1201	VHD1SS250//1EY	J	Diode	AB	C814	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
D1203	VHDBR491D++-1Y	J	Diode	AD	C815	VCKYTV1CF684ZY	J	0.68 16V Ceramic	AB
D1205	VHDDAN222/-1Y	J	Diode	AA	C816	VCKYTV1CF684ZY	J	0.68 16V Ceramic	AB
D1206	RH-EX0227CEZZY	J	Zener Diode	AB	C817	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
D1208	VHDDAN222/-1Y	J	Diode	AA	C818	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D1209	RH-EX1247CEZZY	J	Zener Diode, 5.6V	AB	C819	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D1210	VHDDAN222/-1Y	J	Diode	AA	C820	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
D1211	VHDDAN222/-1Y	J	Diode	AA	C821	VCEAPF1CN107MY	J	100 16V Electrolytic	AD
D1212	VHDBR481K++-1Y	J	Diode	AD	C822	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D2002	VHDBR491D++-1Y	J	Diode	AD	C823	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
D2004	RH-DX0061GEZZY	J	Diode	AD	C824	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
D7701	VHDDAN202K/-1Y	J	Diode	AB	C825	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
PACKAGED CIRCUITS					C826	VCEAPF0GW227MY	J	220 4V Electrolytic	AD
X801	RCRSC0012CEZZY	J	Crystal, 20.25MHz	AH	C827	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
X2002	RFILZ0169TAZZY	J	Filter	AD	C828	VCKYCY1AB224KY	J	0.22 10V Ceramic	AB
X7001	RCRSB0258CEZZ	J	Crystal	AG	C830	VCKYCY1CF224ZY	J	0.22 16V Ceramic	AB
FILTERS AND COILS					C831	VCKYCY1CF224ZY	J	0.22 16V Ceramic	AB
FL7001	RCILF0306CEZZY	J	Coil	AH	C832	VCKYCY1CF224ZY	J	0.22 16V Ceramic	AB
FL7002	RCILV0108GEZZY	J	Coil	AG	C834	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
FL7003	RFILN0097GEZZY	J	Filter	AF	C835	VCEAPF1CW107MY	J	100 16V Electrolytic	AC
FL7004	RFILN0097GEZZY	J	Filter	AF	C836	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
FL7101	RFILN0079GEZZY	J	Filter	AC	C837	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
FL7102	RFILN0079GEZZY	J	Filter	AC	C838	VCEAPF0GW107MY	J	100 4V Electrolytic	AC
L801	VP-9N3R3KR46NY	J	Peaking 3.3μH	AC	C839	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
L802	VP-9N3R3KR46NY	J	Peaking 3.3μH	AC	C840	VCKYTV1CF684ZY	J	0.68 16V Ceramic	AB
					C1101	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1102	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1103	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1104	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1105	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1107	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
					C1108	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA670FE29				
DIGITAL UNIT (Continued)				
C1109	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1110	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1111	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1112	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1113	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1114	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1115	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1116	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1117	VCCCCY1HH560JY	J 56p	50V Ceramic	AB
C1118	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1119	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C1120	VCKYTV1EF104ZY	J 0.1	25V Ceramic	AB
C1122	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C1123	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1124	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1125	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C1126	RC-EZ1339CEZZY	J 220	16V Electrolytic	AD
C1129	RC-EZ1339CEZZY	J 220	16V Electrolytic	AD
C1130	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1131	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1132	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1133	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1134	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1135	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1136	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1137	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1138	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1139	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1141	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1142	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1143	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1144	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1145	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1146	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1147	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1148	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1149	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1150	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1151	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1152	VCCCCY1HH181JY	J 180p	50V Ceramic	AA
C1153	VCKYTV1HB103KY	J 0.01	50V Ceramic	AA
C1154	VCKYTV1HB103KY	J 0.01	50V Ceramic	AA
C1155	VCKYTV1CB334KY	J 0.33	16V Ceramic	AC
C1156	VCCCCY1HH560JY	J 56p	50V Ceramic	AB
C1157	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1202	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1203	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1204	VCCCCY1HH220JY	J 22p	50V Ceramic	AA
C1205	VCCCCY1HH220JY	J 22p	50V Ceramic	AA
C1206	VCEAPF1HN106MY	J 10	50V Electrolytic	AD
C1207	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1208	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB
C1209	VCEASH0JN227MY	J 220	6.3V Electrolytic	AC
C1210	VCEAPF0GW107MY	J 100	4V Electrolytic	AC
C1211	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1212	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1213	VCEAPF1CW107MY	J 100	16V Electrolytic	AC
C1214	VCEAPF0GW107MY	J 100	4V Electrolytic	AC
C1215	RC-KZ1025CEZZY	J 1	10V Ceramic	AB
C1217	VCEAPF1HN475MY	J 4.7	50V Electrolytic	AC
C1218	VCEAPF1CN106MY	J 10	16V Electrolytic	AD
C1223	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1224	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1225	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C1226	VCEAPF1HN106MY	J 10	50V Electrolytic	AD
C1227	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1228	RC-KZ1025CEZZY	J 1	10V Ceramic	AB
C1229	VCEAPF1CN226MY	J 22	16V Electrolytic	AD
C1230	VCKYTV1CB105KY	J 1	16V Ceramic	AC
C1231	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C1232	VCKYTV1HF104ZY	J 0.1	50V Ceramic	AB
C2001	VCKYCY1HB102KY	J 1000p	50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
C2002	VCCCCY1HH221JY	J 220p	50V Ceramic	AA
C2003	VCKYTV1AB105KY	J 1	10V Ceramic	AC
C2007	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2009	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2010	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2015	VCKYCY1HB561KY	J 560p	50V Ceramic	AA
C2016	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2017	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C2018	VCCCCY1HH220JY	J 22p	50V Ceramic	AA
C2020	VCKYCY1HB271KY	J 270p	50V Ceramic	AA
C2021	VCEAPF1CW107MY	J 100	16V Electrolytic	AC
C2023	VCEAPF1CN106MY	J 10	16V Electrolytic	AD
C7001	VCCCCY1HH220JY	J 22p	50V Ceramic	AA
C7002	VCCCCY1HH220JY	J 22p	50V Ceramic	AA
C7003	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7004	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7005	VCEAPF1CN106MY	J 10	16V Electrolytic	AD
C7006	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7007	VCCCCY1HH1R0CY	J 1p	50V Ceramic	AA
C7008	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7009	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7010	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7012	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7013	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7014	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7015	VCEAPF1CN106MY	J 10	16V Electrolytic	AD
C7016	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7017	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7018	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7019	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7020	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7021	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7022	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7023	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7024	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7025	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7026	VCCCCY1HH471JY	J 470p	50V Ceramic	AA
C7027	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C7028	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7029	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7030	VCEASK1CN227MY	J 220	16V Electrolytic	AC
C7031	VCEAPF1CN106MY	J 10	16V Electrolytic	AD
C7032	VCCCCY1HH101JY	J 100p	50V Ceramic	AA
C7033	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C7035	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7036	VCEASK1CN227MY	J 220	16V Electrolytic	AC
C7037	VCCCCY1HH100DY	J 10p	50V Ceramic	AA
C7038	VCCCCY1HH270JY	J 27p	50V Ceramic	AA
C7041	VCCCCY1HH120JY	J 12p	50V Ceramic	AA
C7042	VCCCCY1HH100DY	J 10p	50V Ceramic	AA
C7043	VCCCCY1HH270JY	J 27p	50V Ceramic	AA
C7046	VCEAPF1CN476MY	J 47	16V Electrolytic	AD
C7047	VCEAPF0JN476MY	J 47	6.3V Electrolytic	AD
C7048	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7050	VCCCCY1HH270JY	J 27p	50V Ceramic	AA
C7053	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C7054	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C7055	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C7056	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C7058	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7059	VCEAPF1HN474MY	J 0.47	50V Electrolytic	AD
C7060	VCCCCY1HH391JY	J 390p	50V Ceramic	AB
C7061	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7062	VCCCCY1HH120JY	J 12p	50V Ceramic	AA
C7072	VCCCCY1HH1R0CY	J 1p	50V Ceramic	AA
C7085	VCKYCY1HB103KY	J 0.01	50V Ceramic	AA
C7103	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C7104	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C7105	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA
C7106	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C7111	VCCCCY1HH680JY	J 68p	50V Ceramic	AA
C7112	VCCCCY1HH330JY	J 33p	50V Ceramic	AA
C7121	VCKYTV1CF105ZY	J 1	16V Ceramic	AB
C7122	VCEAPF1CN107MY	J 100	16V Electrolytic	AD
C7123	VCEAPF1CW106MY	J 10	16V Electrolytic	AB
C7124	VCEAPF1CW106MY	J 10	16V Electrolytic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA670FE29									
DIGITAL UNIT (Continued)									
C7201	VCKYTV1AB105KY	J 1	10V Ceramic	AC	R1019	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA
C7202	VCKYTV1AB105KY	J 1	10V Ceramic	AC	R1020	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
C7203	VCKYTV1AB105KY	J 1	10V Ceramic	AC	R1021	VRS-TW2ED102JY	J 1k	1/4W Metal Oxide	AA
C7204	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	R1022	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
C7205	VCKYTV1AB105KY	J 1	10V Ceramic	AC	R1024	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
C7701	VCEAPF0JN476MY	J 47	6.3V Electrolytic	AD	R1025	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
C7702	VCKYCY1EF104ZY	J 0.1	25V Ceramic	AA	R1026	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
RESISTORS					R1027	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R401	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA	R1028	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R402	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA	R1029	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R403	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1030	VRS-TW2ED150JY	J 15	1/4W Metal Oxide	AA
R404	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1031	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R405	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA	R1032	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R406	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R1033	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R408	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R1034	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R409	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1102	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R410	VRS-CY1JF474JY	J 470k	1/16W Metal Oxide	AA	R1104	VRS-CA1JF333JY	J 33k	1/16W Metal Oxide	AA
R412	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA	R1106	VRS-CF1JP333JY	J 33k	1/16W Metal Oxide	AC
R413	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1107	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R414	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA	R1108	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R415	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA	R1109	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R416	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA	R1110	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R417	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1111	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
R418	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1112	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R419	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1114	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R420	VRS-TV1JD000JY	J 0	1/16W Metal Oxide	AA	R1115	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R421	VRS-TV1JD000JY	J 0	1/16W Metal Oxide	AA	R1116	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R423	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R1117	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R705	VRS-CY1JF1R0JY	J 1	1/16W Metal Oxide	AA	R1118	VRS-CY1JF563FY	J 56k	1/16W Metal Oxide	AA
R711	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1119	VRS-CY1JF472FY	J 4.7k	1/16W Metal Oxide	AA
R712	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1120	VRS-TX2HF5R6JY	J 5.6	1/2W Metal Oxide	AB
R714	VRS-CY1JF1R0JY	J 1	1/16W Metal Oxide	AA	R1121	VRS-CY1JF181JY	J 180	1/16W Metal Oxide	AA
R715	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1123	VRS-CY1JF181JY	J 180	1/16W Metal Oxide	AA
R716	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1124	VRS-CY1JF472FY	J 4.7k	1/16W Metal Oxide	AA
R717	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R1125	VRS-TX2HF101JY	J 100	1/2W Metal Oxide	AA
R726	VRS-CY1JF1R0JY	J 1	1/16W Metal Oxide	AA	R1126	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R801	VRS-CB1JF221JY	J 220	1/16W Metal Oxide	AC	R1127	VRS-TX2HF1R8JY	J 1.8	1/2W Metal Oxide	AB
R802	VRS-CB1JF220JY	J 22	1/16W Metal Oxide	AC	R1128	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R803	VRS-CB1JF220JY	J 22	1/16W Metal Oxide	AC	R1129	VRS-CY1JF363FY	J 36k	1/16W Metal Oxide	AA
R804	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA	R1130	VRS-TX2HF5R6JY	J 5.6	1/2W Metal Oxide	AB
R807	VRS-CY1JF750JY	J 75	1/16W Metal Oxide	AA	R1131	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R808	VRS-CY1JF750JY	J 75	1/16W Metal Oxide	AA	R1132	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R809	VRS-CY1JF750JY	J 75	1/16W Metal Oxide	AA	R1134	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R810	VRS-CB1JF220JY	J 22	1/16W Metal Oxide	AC	R1140	VRS-CY1JF273FY	J 27k	1/16W Metal Oxide	AA
R811	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA	R1142	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R812	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R1143	VRS-CY1JF391JY	J 390	1/16W Metal Oxide	AA
R813	VRS-CB1JF220JY	J 22	1/16W Metal Oxide	AC	R1144	VRS-CY1JF391JY	J 390	1/16W Metal Oxide	AA
R814	VRS-CY1JF332JY	J 3.3k	1/16W Metal Oxide	AA	R1145	VRS-TW2ED5R6JY	J 5.6	1/4W Metal Oxide	AA
R815	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1146	VRS-TW2ED8R2JY	J 8.2	1/4W Metal Oxide	AA
R816	VRS-CY1JF470JY	J 47	1/16W Metal Oxide	AA	R1147	VRS-TX2HF000JY	J 0	1/2W Metal Oxide	AB
R819	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R1148	VRS-TX2HF100JY	J 10	1/2W Metal Oxide	AB
R826	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1150	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R831	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1151	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R832	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1152	VRS-CY1JF391JY	J 390	1/16W Metal Oxide	AA
R833	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1153	VRS-CY1JF680JY	J 68	1/16W Metal Oxide	AA
R834	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1154	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
R836	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R1157	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
R838	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA	R1158	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R905	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA	R1160	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1001	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA	R1161	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1002	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA	R1162	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1003	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA	R1163	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R1005	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA	R1164	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1006	VRS-CY1JF243FY	J 24k	1/16W Metal Oxide	AA	R1166	VRS-CY1JF104JY	J 100k	1/16W Metal Oxide	AA
R1007	VRS-CY1JF563FY	J 56k	1/16W Metal Oxide	AA	R1167	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1008	VRS-CY1JF822FY	J 8.2k	1/16W Metal Oxide	AA	R1168	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1009	VRS-CY1JF682FY	J 6.8k	1/16W Metal Oxide	AA	R1169	VRS-CF1JP333JY	J 33k	1/16W Metal Oxide	AC
R1013	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA	R1170	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
R1014	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1171	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
R1016	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA	R1172	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1017	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA	R1173	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
					R1174	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
					R1175	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA
					R1176	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
					R1177	VRS-CY1JF683JY	J 68k	1/16W Metal Oxide	AA
					R1178	VRS-CY1JF123FY	J 12k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA670FE29				
DIGITAL UNIT (Continued)				
R1179	VRS-CY1JF103FY	J 10k	1/16W Metal Oxide	AA
R1182	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1183	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1184	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1185	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1186	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1187	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1188	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R1189	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1190	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1193	VRS-CY1JF680JY	J 68	1/16W Metal Oxide	AA
R1194	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1195	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1196	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1198	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1199	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1201	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1202	VRS-CF1JP220JY	J 22	1/16W Metal Oxide	AC
R1203	VRS-CF1JP220JY	J 22	1/16W Metal Oxide	AC
R1204	VRS-CF1JP220JY	J 22	1/16W Metal Oxide	AC
R1208	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1209	VRS-CA1JF220JY	J 22	1/16W Metal Oxide	AA
R1210	VRS-CY1JF220JY	J 22	1/16W Metal Oxide	AA
R1211	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R1212	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1214	VRS-CB1JF101JY	J 100	1/16W Metal Oxide	AA
R1217	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1218	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA
R1220	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
R1221	VRS-CB1JF332JY	J 3.3k	1/16W Metal Oxide	AC
R1222	VRS-CB1JF000JY	J 0	1/16W Metal Oxide	AC
R1223	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA
R1225	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
R1226	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1228	VRS-TX2HF330JY	J 33	1/2W Metal Oxide	AB
R1230	VRS-TV1JD562JY	J 5.6k	1/16W Metal Oxide	AA
R1231	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1232	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1233	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1234	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
R1235	VRS-CB1JF473JY	J 47k	1/16W Metal Oxide	AC
R1236	VRS-CB1JF473JY	J 47k	1/16W Metal Oxide	AC
R1237	VRS-TX2HF472JY	J 4.7k	1/2W Metal Oxide	AB
R1238	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R1240	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1243	VRS-CY1JF1R0JY	J 1	1/16W Metal Oxide	AA
R1245	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA
R1246	VRS-CY1JF272JY	J 2.7k	1/16W Metal Oxide	AA
R1247	VRS-CY1JF682JY	J 6.8k	1/16W Metal Oxide	AA
R1248	VRS-CY1JF562JY	J 5.6k	1/16W Metal Oxide	AA
R1249	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R1250	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1251	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1252	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R1260	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R2001	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R2002	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2007	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2009	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R2010	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2011	VRS-CB1JF101JY	J 100	1/16W Metal Oxide	AA
R2012	VRS-CA1JF103JY	J 10k	1/16W Metal Oxide	AA
R2013	VRS-CA1JF223JY	J 22k	1/16W Metal Oxide	AA
R2014	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA
R2015	VRS-CB1JF331JY	J 330	1/16W Metal Oxide	AC
R2016	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2017	VRS-CA1JF102JY	J 1k	1/16W Metal Oxide	AA
R2018	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2019	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R2020	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R2021	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R2022	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R2029	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2030	VRS-CA1JF333JY	J 33k	1/16W Metal Oxide	AA
R2033	VRS-CB1JF101JY	J 100	1/16W Metal Oxide	AA
R2041	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2042	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2043	VRS-CB1JF101JY	J 100	1/16W Metal Oxide	AA
R2044	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2045	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2052	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2053	VRS-CA1JF101JY	J 100	1/16W Metal Oxide	AA
R2055	VRS-CA1JF223JY	J 22k	1/16W Metal Oxide	AA
R2056	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2057	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2058	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R2060	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R2061	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R2067	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R2068	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R7002	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R7003	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R7004	VRS-CY1JF182JY	J 1.8k	1/16W Metal Oxide	AA
R7005	VRS-CY1JF182JY	J 1.8k	1/16W Metal Oxide	AA
R7006	VRS-CY1JF472JY	J 4.7k	1/16W Metal Oxide	AA
R7007	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R7008	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7009	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R7010	VRS-CY1JF223JY	J 22k	1/16W Metal Oxide	AA
R7011	VRS-CY1JF224JY	J 220k	1/16W Metal Oxide	AA
R7012	VRS-CY1JF221JY	J 220	1/16W Metal Oxide	AA
R7013	VRS-CY1JF561JY	J 560	1/16W Metal Oxide	AA
R7014	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7015	VRS-CY1JF391JY	J 390	1/16W Metal Oxide	AA
R7016	VRS-CY1JF561JY	J 560	1/16W Metal Oxide	AA
R7017	VRS-CY1JF561JY	J 560	1/16W Metal Oxide	AA
R7018	VRS-CY1JF911JY	J 910	1/16W Metal Oxide	AB
R7019	VRS-CY1JF561JY	J 560	1/16W Metal Oxide	AA
R7020	VRS-CY1JF911JY	J 910	1/16W Metal Oxide	AB
R7021	VRS-CY1JF132JY	J 1.3k	1/16W Metal Oxide	AG
R7022	VRS-CY1JF682JY	J 6.8k	1/16W Metal Oxide	AA
R7023	VRS-CF1JP101JY	J 100	1/16W Metal Oxide	AC
R7024	VRS-CF1JP101JY	J 100	1/16W Metal Oxide	AC
R7025	VRS-CF1JP101JY	J 100	1/16W Metal Oxide	AC
R7029	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R7030	VRS-CY1JF122JY	J 1.2k	1/16W Metal Oxide	AA
R7031	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7032	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7033	VRS-CY1JF100JY	J 10	1/16W Metal Oxide	AA
R7034	VRS-CY1JF471JY	J 470	1/16W Metal Oxide	AA
R7035	VRS-CY1JF911JY	J 910	1/16W Metal Oxide	AB
R7036	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7037	VRS-CY1JF152JY	J 1.5k	1/16W Metal Oxide	AA
R7038	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R7039	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7040	VRS-CY1JF911JY	J 910	1/16W Metal Oxide	AB
R7041	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R7042	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R7043	VRS-CY1JF222JY	J 2.2k	1/16W Metal Oxide	AA
R7044	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA
R7045	VRS-CY1JF473JY	J 47k	1/16W Metal Oxide	AA
R7046	VRS-CY1JF182JY	J 1.8k	1/16W Metal Oxide	AA
R7047	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R7048	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7049	VRS-CY1JF333JY	J 33k	1/16W Metal Oxide	AA
R7050	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R7051	VRS-CY1JF000JY	J 0	1/16W Metal Oxide	AA
R7053	VRS-CB1JF104JY	J 100k	1/16W Metal Oxide	AA
R7103	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7104	VRS-CY1JF102JY	J 1k	1/16W Metal Oxide	AA
R7106	VRS-CY1JF101JY	J 100	1/16W Metal Oxide	AA
R7110	VRS-CY1JF103JY	J 10k	1/16W Metal Oxide	AA
R7112	VRS-TX2HF2R2JY	J 2.2	1/2W Metal Oxide	AB
R7113	VRS-CE3AF120JY	J 12	1W Metal Oxide	AC
R7114	VRS-CE3AF100JY	J 10	1W Metal Oxide	AC
R7201	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R7202	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA
R7203	VRS-CY1JF105JY	J 1M	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA670FE29				
DIGITAL UNIT (Continued)				

R7701	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide	AA
R7702	VRS-CY1JF332JY	J	3.3k 1/16W	Metal Oxide	AA
R7703	VRS-CY1JF332JY	J	3.3k 1/16W	Metal Oxide	AA
R7704	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide	AA
R7705	VRS-CE3AF4R7JY	J	4.7 1W	Metal Oxide	AC

MISCELLANEOUS PARTS

FB801	RBLN-0090CEZZY	J	Ferrite Bead	AD
FB802	RBLN-0090CEZZY	J	Ferrite Bead	AD
FB1201	RBLN-0090CEZZY	J	Ferrite Bead	AD
FB1202	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB1203	RBLN-0076TAZZY	J	Ferrite Bead	AC
FB7001	RBLN-0061TAZZY	J	Ferrite Bead	AD
FB7002	RBLN-0061TAZZY	J	Ferrite Bead	AD
FB7003	RBLN-0061TAZZY	J	Ferrite Bead	AD
FB7101	RBLN-0059CEZZY	J	Ferrite Bead	AB
FB7102	RBLN-0059CEZZY	J	Ferrite Bead	AB
FB7103	RBLN-0059CEZZY	J	Ferrite Bead	AB
FB7104	RBLN-0059CEZZY	J	Ferrite Bead	AB
FB7105	RBLN-0059CEZZY	J	Ferrite Bead	AB
P2001	QPLGN0558REZZY	J	Plug, 5-pin	AE
P2003	QPLGN1058REZZY	J	Plug, 10-pin	AD
P2004	QPLGN0165FJZZY	J	Plug, 5-pin	AD
SC1201	QSOCNA002WJPZY	J	Socket, 20-pin	AD
SC1202	QSOCN0687FJZZY	J	Socket, 50-pin	AF
SC1203	QSOCN0206FJZZY	J	Socket, 30-pin	AF
SC2001	QSOCN0464FJZZY	J	Socket, 50-pin	AH
	PSLDM4693CEFW	J	Shield	AD

Ref. No.	Part No.	★	Description	Code
DUNTKB412DE03				
ANALOG UNIT				

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

TU3201	VTUVT2U5UF553	J	Tuner	BC
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INTEGRATED CIRCUITS

IC3301	VHiNJM4560M-1Y	J	NJM4560M	AG
IC3303	VHiNJM4560M-1Y	J	NJM4560M	AG
IC3304	RH-iX3370CEN1Q	J	MSP3440G-QA-B8	AY
IC3305	VHiLA4635A+-1S	J	LA4635A	AM
IC3501	VHiTC4053BF1EY	J	TC4053BF	AF
IC3701	VHiNJM2377M-1Y	J	NJM2377M	AK
IC3702	VHiNJM2147M-1Y	J	NJM2147M-TE1	AF

TRANSISTORS

Q3201	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3202	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3303	VSDTA144EE/-1Y	J	DTA144EE	AA
Q3304	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3305	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3306	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3500	VSUMG4N++++1Y	J	UMG4N++++	AB
Q3501	VS2SK1467/-1Y	J	2SK1467	AE
Q3502	VS2SK1467/-1Y	J	2SK1467	AE
Q3503	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3504	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3505	VSDTC114EE/-1Y	J	DTC114EE	AB
Q3510	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3511	VSDTC314TK/-1Y	J	DTC314TK	AC
Q3512	VS2SA1037KQ-1Y	J	2SA1037KQ	AA
Q3600	VSUPA606T/-1Y	J	UPA606T	AD
Q3601	VSUPA606T/-1Y	J	UPA606T	AD
Q3602	VSUPA606T/-1Y	J	UPA606T	AD
Q3603	VSUPA606T/-1Y	J	UPA606T	AD
Q3604	VSUPA606T/-1Y	J	UPA606T	AD
Q3700	VSFMMT718/-1Y	J	FMMT718	AE
Q3701	VSDTC144EE/-1Y	J	DTC114EE	AA
Q3702	VS2SK2503/-1Y	J	2SK2503	AE
Q3704	VSFMMT619/-1Y	J	FMMT619	AE
Q3706	VSiMZ1/////1Y	J	IMZ1/////	AB
Q3707	VS2SC3928AR-1Y	J	2SC3928AR	AB
Q3708	VSDTC114YE/-1Y	J	DTC114EE	AB
Q3709	VSFMMT718/-1Y	J	FMMT718	AE
Q3710	VSDTC144EE/-1Y	J	DTC114EE	AA

DIODES

D3301	RH-EX1396CEZZY	J	Zener Diode, 6.8V	AB
D3302	VHDDAN222/-1Y	J	Diode	AA
D3401	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3402	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D3501	VHDDAN222/-1Y	J	Diode	AA
D3600	VHdiMN10///-1Y	J	Diode	AB
D3601	VHdiMN10///-1Y	J	Diode	AB
D3602	VHdiMN10///-1Y	J	Diode	AB
D3603	VHdiMN10///-1Y	J	Diode	AB
D3604	VHDDAN222/-1Y	J	Diode	AA
D3605	VHDDAN222/-1Y	J	Diode	AA
D3606	VHDDAN222/-1Y	J	Diode	AA
D3607	VHDDAN222/-1Y	J	Diode	AA
D3608	VHDDAN222/-1Y	J	Diode	AA
D3700	VHDDAN222/-1Y	J	Diode	AA
D3703	VHDSFPB56//2EY	J	Diode	AC
D3704	VHD1SS250//1EY	J	Diode	AB
D3705	VHD1SS250//1EY	J	Diode	AB
D3706	VHDSFPB74//2EY	J	Diode	AD
D3707	VHDSFPB74//2EY	J	Diode	AD
D3708	VHDDAN222/-1Y	J	Diode	AA
D3709	VHDDAN222/-1Y	J	Diode	AA
D3711	VHDDAN222/-1Y	J	Diode	AA

PACKAGED CIRCUIT

X3301	RCRSB0307CEZZ	J	Crystal, 18.432MHz	AG
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Ref. No.	Part No.	★	Description	Code
DUNTKB412DE03				
ANALOG UNIT (Continued)				
COILS				
L3201	VP-1M220J2R9NY	J	Peaking 22μH	AB
L3202	RCiLPA027WJZZ	J	Coil	AD
L3301	VP-1M101J7R7NY	J	Peaking 100μH	AC
L3302	VP-1M4R7J1R2NY	J	Peaking 4.7μH	AB
L3500	VP-1M101J7R7NY	J	Peaking 100μH	AC
L3700	RCiLPA026WJZZ	J	Coil	AD
L3702	RCiLPA026WJZZ	J	Coil	AD
L3703	RCiLC0057CEZZY	J	Coil	AD
L3704	RCiLC0055CEZZY	J	Coil	AD
TRANSFORMER				
T3701	RTRNW0010CEZZY	J	Transformer	AL
CONTROL				
R3760	RVR-M0111CEZZY	J	1k(B) B+ Adj.	AC
CAPACITORS				
C3201	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3202	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C3203	VCCCCY1HH330JY	J	33p 50V Ceramic	AA
C3204	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3205	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3206	VCKYCY1HF103ZY	J	0.01 50V Ceramic	AA
C3208	RC-EZ1351CEZZ	J	3300 6.3V Electrolytic	AF
C3210	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3315	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3316	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3317	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3318	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3319	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3320	VCEAPF1CN476MY	J	47 16V Electrolytic	AD
C3321	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3322	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3323	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3324	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3325	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3328	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3329	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3330	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3332	VCEAPF0JN107MY	J	100 6.3V Electrolytic	AD
C3333	VCEAPF1CN107MY	J	100 16V Electrolytic	AD
C3334	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3335	VCKYCY1HB272KY	J	2700p 50V Ceramic	AA
C3336	VCKYCY1HB272KY	J	2700p 50V Ceramic	AA
C3337	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3338	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3339	VCEAPF1HN335MY	J	3.3 50V Electrolytic	AD
C3340	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3341	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3342	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3343	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3344	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3345	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3346	VCCCCY1HH101JY	J	100p 50V Ceramic	AA
C3349	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3350	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3351	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
C3352	VCEAPF0JN107MY	J	100 6.3V Electrolytic	AD
C3354	VCCCCY1HH560JY	J	56p 50V Ceramic	AB
C3355	VCCCCY1HH560JY	J	56p 50V Ceramic	AB
C3356	VCCCCY1HH560JY	J	56p 50V Ceramic	AB
C3357	VCCCCY1HH5R0CY	J	5.0p 50V Ceramic	AA
C3358	VCCCCY1HH5R0CY	J	5.0p 50V Ceramic	AA
C3359	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3360	VCEAPF1CN107MY	J	100 16V Electrolytic	AD
C3361	VCEAPF1HN105MY	J	1 50V Electrolytic	AD
C3362	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3363	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3364	VCEAPF1HN105MY	J	1 50V Electrolytic	AD
C3365	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3366	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD

Ref. No.	Part No.	★	Description	Code
C3367	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3368	VCEAPF1CN106MY	J	10 16V Electrolytic	AD
C3369	RC-EZ1274CEZZ	J	1000 16V Electrolytic	AD
C3370	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C3371	VCEA4A1CN228M	J	2200 16V Electrolytic	AF
C3372	RC-EZ1274CEZZ	J	1000 16V Electrolytic	AD
C3375	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3377	VCKYCY1CB273KY	J	0.027 16V Ceramic	AB
C3380	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3382	VCKYCY1HB102KY	J	1000p 50V Ceramic	AA
C3383	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3384	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3385	VCKYCY1HB472KY	J	4700p 50V Ceramic	AA
C3386	VCKYCY1HB472KY	J	4700p 50V Ceramic	AA
C3387	VCKYCY1HB331KY	J	330p 50V Ceramic	AA
C3388	VCKYCY1HB331KY	J	330p 50V Ceramic	AA
C3389	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3401	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3509	VCEAPF1CW107MY	J	100 16V Electrolytic	AC
C3510	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3512	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3513	VCEASH1CN477MY	J	470 16V Electrolytic	AD
C3514	VCEAPF0JW336MY	J	33 6.3V Electrolytic	AB
C3515	VCEAPF0JW226MY	J	22 6.3V Electrolytic	AB
C3516	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
C3517	VCKYCY1EB223KY	J	0.022 25V Ceramic	AA
C3518	VCKYCY1EB223KY	J	0.022 25V Ceramic	AA
C3520	VCEAPF1EW475MY	J	4.7 25V Electrolytic	AB
C3521	VCEAPF1EW475MY	J	4.7 25V Electrolytic	AB
C3522	VCEAPF1CW106MY	J	10 16V Electrolytic	AB
C3600	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3601	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3602	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3603	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3604	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3605	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3606	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3607	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3608	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3609	VCKYTQ1EF105ZY	J	1 25V Ceramic	AD
C3700	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3701	VCEAPF1EW475MY	J	4.7 25V Electrolytic	AB
C3702	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
C3703	VCEAPT1CN226MY	J	22 16V Electrolytic	AC
C3704	VCCCCY1HH471JY	J	470p 50V Ceramic	AA
C3705	VCKYCY1EB103KY	J	0.01 25V Ceramic	AA
C3710	VCEASH1CN337MY	J	330 16V Electrolytic	AE
C3711	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C3712	VCAAPF1CJ826MY	J	82 16V Electrolytic	AG
C3713	VCKYCY1HB562KY	J	5600p 50V Ceramic	AA
C3714	VCEASH1HN476MY	J	47 50V Electrolytic	AD
C3715	VCKYTV1HF104ZY	J	0.1 50V Ceramic	AB
C3716	VCEASH1EN227MY	J	220 25V Electrolytic	AE
C3717	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C3718	VCEASH1CN337MY	J	330 16V Electrolytic	AE
C3719	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3720	VCCCCY1HH181JY	J	180p 50V Ceramic	AA
C3721	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C3722	VCAAPF0JJ157MY	J	150 6.3V Electrolytic	AG
C3724	VCEASH1CN337MY	J	330 16V Electrolytic	AE
C3725	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C3727	VCEASH1CN477MY	J	470 16V Electrolytic	AD
C3728	VCKYTV1CF105ZY	J	1 16V Ceramic	AB
C3730	VCKYTV1HF104ZY	J	0.1 50V Ceramic	AB
C3732	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
C3733	RC-KZ1025CEZZY	J	1 10V Ceramic	AB
C3734	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3735	VCKYCY1HF103ZY	J	0.01 50V Ceramic	AA
C3740	VCKYCY1EF104ZY	J	0.1 25V Ceramic	AA
C3741	VCEAPF1HN225MY	J	2.2 50V Electrolytic	AD
C3750	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
RESISTORS				
R3201	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3202	VRS-CY1JF153JY	J	15k 1/16W Metal Oxide	AA
R3203	VRS-CY1JF332JY	J	3.3k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKB412DE03									
ANALOG UNIT (Continued)									
R3204	VRS-CY1JF152JY	J	1.5k 1/16W	Metal Oxide AA	R3432	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3205	VRS-CY1JF331JY	J	330 1/16W	Metal Oxide AA	R3433	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3206	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3434	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA
R3207	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3523	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA
R3208	VRS-CA1JF561JY	J	560 1/16W	Metal Oxide AA	R3524	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA
R3306	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3528	VRS-CY1JF471JY	J	470 1/16W	Metal Oxide AA
R3310	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3529	VRS-CY1JF471JY	J	470 1/16W	Metal Oxide AA
R3313	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3530	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA
R3314	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3531	VRS-TQ2BD680JY	J	68 1/8W	Metal Oxide AA
R3325	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R3532	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3326	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA	R3533	VRS-CY1JF680JY	J	68 1/16W	Metal Oxide AA
R3327	VRS-CY1JF184FY	J	180k 1/16W	Metal Oxide AA	R3534	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA
R3328	VRS-CY1JF184FY	J	180k 1/16W	Metal Oxide AA	R3535	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA
R3331	VRS-CY1JF473JY	J	47k 1/16W	Metal Oxide AA	R3536	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA
R3332	VRS-CY1JF473JY	J	47k 1/16W	Metal Oxide AA	R3537	VRS-CY1JF272JY	J	2.7k 1/16W	Metal Oxide AA
R3333	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R3540	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3334	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA	R3542	VRS-CY1JF680JY	J	68 1/16W	Metal Oxide AA
R3335	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3543	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA
R3336	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3544	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA
R3337	VRS-CY1JF102JY	J	100k 1/16W	Metal Oxide AA	R3545	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA
R3338	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3546	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3341	VRS-CY1JF561JY	J	560 1/16W	Metal Oxide AA	R3547	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3342	VRS-CY1JF561JY	J	560 1/16W	Metal Oxide AA	R3550	VRS-TX2HF221JY	J	220 1/2W	Metal Oxide AB
R3343	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3551	VRS-TX2HF221JY	J	220 1/2W	Metal Oxide AB
R3344	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3552	VRS-CY1JF153JY	J	15k 1/16W	Metal Oxide AA
R3347	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3553	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3348	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3558	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3350	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3561	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3351	VRS-CY1JF104JY	J	100k 1/16W	Metal Oxide AA	R3562	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3353	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3600	VRS-CB1JF222JY	J	2.2k 1/16W	Metal Oxide AC
R3354	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3601	VRS-CB1JF222JY	J	2.2k 1/16W	Metal Oxide AC
R3355	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3602	VRS-CA1JF222JY	J	2.2k 1/16W	Metal Oxide AA
R3357	VRS-CY1JF105JY	J	1M 1/16W	Metal Oxide AA	R3604	VRS-CB1JF824JY	J	820k 1/16W	Metal Oxide AC
R3358	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA	R3605	VRS-CB1JF824JY	J	820k 1/16W	Metal Oxide AC
R3359	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3606	VRS-CA1JF824JY	J	820k 1/16W	Metal Oxide AB
R3360	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3607	VRS-CB1JF562JY	J	5.6k 1/16W	Metal Oxide AC
R3361	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3608	VRS-CB1JF562JY	J	5.6k 1/16W	Metal Oxide AC
R3362	VRS-CY1JF272JY	J	2.7k 1/16W	Metal Oxide AA	R3609	VRS-CA1JF562JY	J	5.6k 1/16W	Metal Oxide AA
R3363	VRS-CY1JF272JY	J	2.7k 1/16W	Metal Oxide AA	R3610	VRS-CY1JF563JY	J	56k 1/16W	Metal Oxide AA
R3364	VRS-CY1JF122JY	J	1.2k 1/16W	Metal Oxide AA	R3700	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA
R3365	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA	R3701	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3366	VRS-CY1JF472JY	J	4.7k 1/16W	Metal Oxide AA	R3702	VRS-TW2ED102JY	J	1k 1/4W	Metal Oxide AA
R3367	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA	R3703	VRS-CY1JF274JY	J	270k 1/16W	Metal Oxide AA
R3369	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3704	VRS-CY1JF133FY	J	13k 1/16W	Metal Oxide AA
R3370	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3705	VRS-CY1JF184JY	J	180k 1/16W	Metal Oxide AA
R3371	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3706	VRS-CY1JF100JY	J	10 1/16W	Metal Oxide AA
R3372	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3707	VRS-CY1JF105JY	J	1M 1/16W	Metal Oxide AA
R3373	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3708	VRS-CY1JF682JY	J	6.8k 1/16W	Metal Oxide AA
R3375	VRS-CY1JF472FY	J	4.7k 1/16W	Metal Oxide AA	R3710	VRS-CY1JF273FY	J	27k 1/16W	Metal Oxide AA
R3376	VRS-CY1JF102FY	J	1k 1/16W	Metal Oxide AA	R3716	VRS-TX2HF000JY	J	0 1/2W	Metal Oxide AB
R3377	VRS-CY1JF472FY	J	4.7k 1/16W	Metal Oxide AA	R3718	VRS-CE3AF821JY	J	820 1W	Metal Oxide AC
R3378	VRS-CY1JF102FY	J	1k 1/16W	Metal Oxide AA	R3721	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3379	VRS-CY1JF822JY	J	8.2k 1/16W	Metal Oxide AA	R3722	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3380	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA	R3724	VRS-CY1JF1R0JY	J	1 1/16W	Metal Oxide AA
R3381	VRS-CY1JF562JY	J	5.6k 1/16W	Metal Oxide AA	R3725	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3383	VRS-CY1JF153JY	J	15k 1/16W	Metal Oxide AA	R3726	VRS-TQ2BD683JY	J	68k 1/8W	Metal Oxide AA
R3384	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3727	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA
R3386	VRS-CY1JF183FY	J	18k 1/16W	Metal Oxide AA	R3728	VRS-CY1JF393JY	J	39k 1/16W	Metal Oxide AA
R3387	VRS-CY1JF183FY	J	18k 1/16W	Metal Oxide AA	R3730	VRS-CY1JF223JY	J	22k 1/16W	Metal Oxide AA
R3388	VRS-CY1JF183FY	J	18k 1/16W	Metal Oxide AA	R3731	VRS-CY1JF222JY	J	2.2k 1/16W	Metal Oxide AA
R3389	VRS-CY1JF183FY	J	18k 1/16W	Metal Oxide AA	R3733	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
R3401	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3734	VRS-CY1JF103FY	J	10k 1/16W	Metal Oxide AA
R3402	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	R3735	VRS-CY1JF123FY	J	12k 1/16W	Metal Oxide AA
R3409	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3736	VRS-CY1JF243FY	J	24k 1/16W	Metal Oxide AA
R3410	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3737	VRS-CY1JF103JY	J	10k 1/16W	Metal Oxide AA
R3411	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	R3738	VRS-CY1JF103FY	J	10k 1/16W	Metal Oxide AA
R3412	VRS-TQ2BD750JY	J	75 1/8W	Metal Oxide AA	R3739	VRS-CY1JF622FY	J	6.2k 1/16W	Metal Oxide AA
R3413	VRS-CY1JF101JY	J	100 1/16W	Metal Oxide AA	R3740	VRS-CY1JF473FY	J	47k 1/16W	Metal Oxide AA
R3428	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	R3741	VRS-CY1JF123FY	J	12k 1/16W	Metal Oxide AA
R3429	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	R3742	VRS-CY1JF182FY	J	1.8k 1/16W	Metal Oxide AA
R3430	VRS-CY1JF750JY	J	75 1/16W	Metal Oxide AA	R3743	VRS-CY1JF122FY	J	1.2k 1/16W	Metal Oxide AA
R3431	VRS-CY1JF000JY	J	0 1/16W	Metal Oxide AA	R3745	VRS-CY1JF682FY	J	6.8k 1/16W	Metal Oxide AA
					R3746	VRS-CY1JF122FY	J	1.2k 1/16W	Metal Oxide AA
					R3749	VRS-CY1JF102JY	J	1k 1/16W	Metal Oxide AA
					R3750	VRS-CY1JF391JY	J	390 1/16W	Metal Oxide AA
					R3751	VRS-TV1JD103JY	J	10k 1/10W	Metal Oxide AA

Ref. No.	Part No.	★	Description	Code
DUNTKB413DE03				
ANALOG UNIT (Continued)				
R3752	VRS-CY1JF102JY	J	1k 1/16W Metal Oxide	AA
R3753	VRS-TX2HF000JY	J	0 1/2W Metal Oxide	AB
R3754	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R3759	VRS-TW2ED102JY	J	1k 1/4W Metal Oxide	AA
R3761	VRS-CY1JF272JY	J	2.7k 1/16W Metal Oxide	AA
R3762	VRS-TW2ED561JY	J	560 1/4W Metal Oxide	AA
R3766	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA
R3901	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
R3902	VRS-TQ2BD000JY	J	0 1/8W Metal Oxide	AA
MISCELLANEOUS PARTS				
△ F3701	QFS-B2021GEZZ	J	Fuse, 2.0A/125V	AD
△ F3702	QFS-B1621GEZZ	J	Fuse, 1.6A/125V	AD
FH3701	QFSDH1002CEZZ	J	Fuse Holder	AA
FH3702	QFSDH1002CEZZ	J	Fuse Holder	AA
FH3703	QFSDH1002CEZZ	J	Fuse Holder	AA
FH3704	QFSDH1002CEZZ	J	Fuse Holder	AA
FB3301	RBLN-0006TAZZY	J	Ferrite Bead	AB
FB3302	RBLN-0035TAZZY	J	Ferrite Bead	AB
FB3700	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB3701	RBLN-0095CEZZY	J	Ferrite Bead	AD
FB3704	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB3705	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB3706	RBLN-0254TAZZY	J	Ferrite Bead	AB
FB3707	RBLN-0254TAZZY	J	Ferrite Bead	AB
FB3708	RBLN-0051TAZZY	J	Ferrite Bead	AC
FB3709	RBLN-0095CEZZY	J	Ferrite Bead	AD
J3301	QJAKF0066CEZZ	J	AUDIO(L)/(R)(COMPONENT)	AE
J3401	QJAKG0085CEZZ	J	Y/PB/PR(COMPONENT)	AG
J3404	QJAKG0069CEZZ	J	AV IN(AV-IN2/OUT)	AG
J3407	QJAKG0068CEZZ	J	Jack, AV-IN1	AG
J3500	QJAKJ0046CEZZ	J	HEADPHONE	AE
J3701	QJAKE0193CEZZ	J	POWER INPUT(DC 13V)	AK
P3502	QPLGN0478GEZZ	J	Plug, 4-pin	AB
P3601	QPLGN0478GEZZ	J	Plug, 4-pin	AB
P3602	QPLGN0678GEZZ	J	Plug, 6-pin	AB
P3702	QCNW-A696WJZZ	J	Plug, 5-pin	AD
P3703	QPLGN0378GEZZ	J	Plug, 3-pin	AB
P3704	QPLGN0378GEZZ	J	Plug, 3-pin	AB
SC3403	QSOCN0464FJZZY	J	Socket, 50-pin	AH
SC3405	QSOCN0456CEZZ	J	S-VIDEO(AV-IN1)	AE
	QCNW-A267WJZZ	J	Connecting Cord (P3503-P3504)	AK

Ref. No.	Part No.	★	Description	Code
DUNTKB413DE03				
CONTROL UNIT				
DIODES				
D4008	RH-EX1283CEZZY	J	Zener Diode, 18V	AB
D4009	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
D4010	RH-EX1271CEZZY	J	Zener Diode, 12V	AB
RESISTORS				
R4005	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA
R4006	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
R4011	VRS-CY1JF123JY	J	12k 1/16W Metal Oxide	AA
R4012	VRS-CY1JF822JY	J	8.2k 1/16W Metal Oxide	AA
SWITCHES				
S4701	QSW-P0035GEZZ	J	MAIN POWER	AF
SW4002	QSW-K0108CEZZY	J	CH(✓)	AD
SW4003	QSW-K0108CEZZY	J	CH(∧)	AD
SW4004	QSW-K0108CEZZY	J	MENU	AD
SW4006	QSW-K0108CEZZY	J	TV/VIDEO	AD
SW4007	QSW-K0108CEZZY	J	VOL(-)	AD
SW4008	QSW-K0108CEZZY	J	VOL(+)	AD
MISCELLANEOUS PARTS				
P4004	QPLGN0564TAZZY	J	Plug, 5-pin	AC
	QCNW-A695WJZZ	J	Connecting Cord	AG

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKB414DE03					DUNTKB416DE01				
R/C, LED UNIT					INVERTER-A UNIT				
TRANSISTORS					TRANSISTORS				
Q4003	VSDTC144EE/-1Y	J	DTC144EE	AA	Q6700	VSFZT1053A/-1Y	J	FZT1053A	AG
Q4004	VSDTC144EE/-1Y	J	DTC144EE	AA	Q6701	VSFZT1053A/-1Y	J	FZT1053A	AG
Q4007	VSUMG4N++++-1Y	J	UMG4N++++	AB	Q6702	VS2SA1530AR-1Y	J	2SA1530AR	AB
DIODES					Q6703	VSFZT1053A/-1Y	J	FZT1053A	AG
D4012	RH-EX1271CEZZY	J	Zener Diode, 12V	AB	Q6704	VSFZT1053A/-1Y	J	FZT1053A	AG
D4013	RH-EX1271CEZZY	J	Zener Diode, 12V	AB	Q6705	VS2SA1530AR-1Y	J	2SA1530AR	AB
D4014	RH-PX0421CEZZY	J	POWER Indicator	AD	Q6706	VSFZT1053A/-1Y	J	FZT1053A	AG
D4015	RH-PX0421CEZZY	J	SLEEP Indicator	AD	Q6707	VSFZT1053A/-1Y	J	FZT1053A	AG
D4022	RH-EX1271CEZZY	J	Zener Diode, 12V	AB	Q6708	VS2SA1530AR-1Y	J	2SA1530AR	AB
CAPACITOR					DIODE				
C4018	RC-KZ1025CEZZY	J	1 10V Ceramic	AB	D6700	VHDiMN10///-1Y	J	Diode	AB
RESISTORS					COILS				
R4021	VRS-CY1JF101JY	J	100 1/16W Metal Oxide	AA	L6700	RCiLPA034WJZZ	J	Coil	AD
R4023	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA	L6702	RCiLPA034WJZZ	J	Coil	AD
R4024	VRS-CY1JF471JY	J	470 1/16W Metal Oxide	AA	L6704	RCiLPA034WJZZ	J	Coil	AD
R4029	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA	TRANSFORMERS				
R4030	VRS-CY1JF472JY	J	4.7k 1/16W Metal Oxide	AA	△ T6700	RTRNZ0806CEZZQ	J	Transformer	AM
MISCELLANEOUS PARTS					△ T6701	RTRNZ0806CEZZQ	J	Transformer	AM
P4005	QPLGN0564TAZZY	J	Plug, 5-pin	AC	△ T6702	RTRNZ0806CEZZQ	J	Transformer	AM
RMC4002	RRMCU0239CEZZ	J	R/C Receiver	AG	△ T6703	RTRNZ0806CEZZQ	J	Transformer	AM
					△ T6704	RTRNZ0806CEZZQ	J	Transformer	AM
					△ T6705	RTRNZ0806CEZZQ	J	Transformer	AM
					CAPACITORS				
					C6702	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6703	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6704	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
					C6707	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6708	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6709	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
					C6712	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6713	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
					C6714	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
					C6725	RC-FZA043WJZZ	J	0.14 250V Film	AE
					C6726	RC-FZA043WJZZ	J	0.14 250V Film	AE
					C6727	RC-FZA043WJZZ	J	0.14 250V Film	AE
					RESISTORS				
					R6700	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6701	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6702	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
					R6703	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
					R6704	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6705	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6706	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
					R6707	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
					R6708	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6709	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
					R6710	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
					R6711	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
					MISCELLANEOUS PARTS				
					△ F6700	QFS-B1021GEZZ	J	Fuse, 1A/125V	AE
					△ F6701	QFS-B1021GEZZ	J	Fuse, 1A/125V	AE
					△ F6702	QFS-B1021GEZZ	J	Fuse, 1A/125V	AE
					FH6700	QFSDH1002CEZZ	J	Fuse Holder	AA
					FH6701	QFSDH1002CEZZ	J	Fuse Holder	AA
					FH6702	QFSDH1002CEZZ	J	Fuse Holder	AA
					FH6703	QFSDH1002CEZZ	J	Fuse Holder	AA
					FH6704	QFSDH1002CEZZ	J	Fuse Holder	AA
					FH6705	QFSDH1002CEZZ	J	Fuse Holder	AA
					P6700	QPLGN0155FJZZY	J	Plug, 3-pin	AE
					P6701	QPLGN0155FJZZY	J	Plug, 3-pin	AE
					P6702	QPLGN0155FJZZY	J	Plug, 3-pin	AE
					P6705	QCNW-A463WJZZ	J	Connecting Cord (P3703)	AD

Ref. No.	Part No.	★	Description	Code
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DUNTKB417DE01 INVERTER-B UNIT

TRANSISTORS

Q6709	VSFZT1053A/-1	J	FZT1053A	AG
Q6709	VSFZT1053A/-1Y	J	FZT1053A	AG
Q6710	VSFZT1053A/-1Y	J	FZT1053A	AG
Q6711	VS2SA1530AR-1Y	J	2SA1530AR	AB
Q6712	VSFZT1053A/-1Y	J	FZT1053A	AG
Q6713	VSFZT1053A/-1Y	J	FZT1053A	AG
Q6714	VS2SA1530AR-1Y	J	2SA1530AR	AB

DIODE

D6701	VHDDAN222//1Y	J	Diode	AA
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COILS

L6706	RCiLPA034WJZZ	J	Coil	AD
L6708	RCiLPA034WJZZ	J	Coil	AD

TRANSFORMERS

△ T6706	RTRNZ0806CEZZQ	J	Transformer	AM
△ T6707	RTRNZ0806CEZZQ	J	Transformer	AM
△ T6708	RTRNZ0806CEZZQ	J	Transformer	AM
△ T6709	RTRNZ0806CEZZQ	J	Transformer	AM

CAPACITORS

C6717	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6718	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6719	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
C6722	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6723	VCKYCY1CB333KY	J	0.033 16V Ceramic	AA
C6724	VCEA4A1CN108M	J	1000 16V Electrolytic	AD
C6740	RC-FZA043WJZZ	J	0.14 250V Film	AE
C6741	RC-FZA043WJZZ	J	0.14 250V Film	AE

RESISTORS

R6712	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
R6713	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
R6714	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R6715	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA
R6716	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
R6717	VRS-TW2ED332JY	J	3.3k 1/4W Metal Oxide	AB
R6718	VRS-CY1JF103JY	J	10k 1/16W Metal Oxide	AA
R6719	VRS-CY1JF333JY	J	33k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

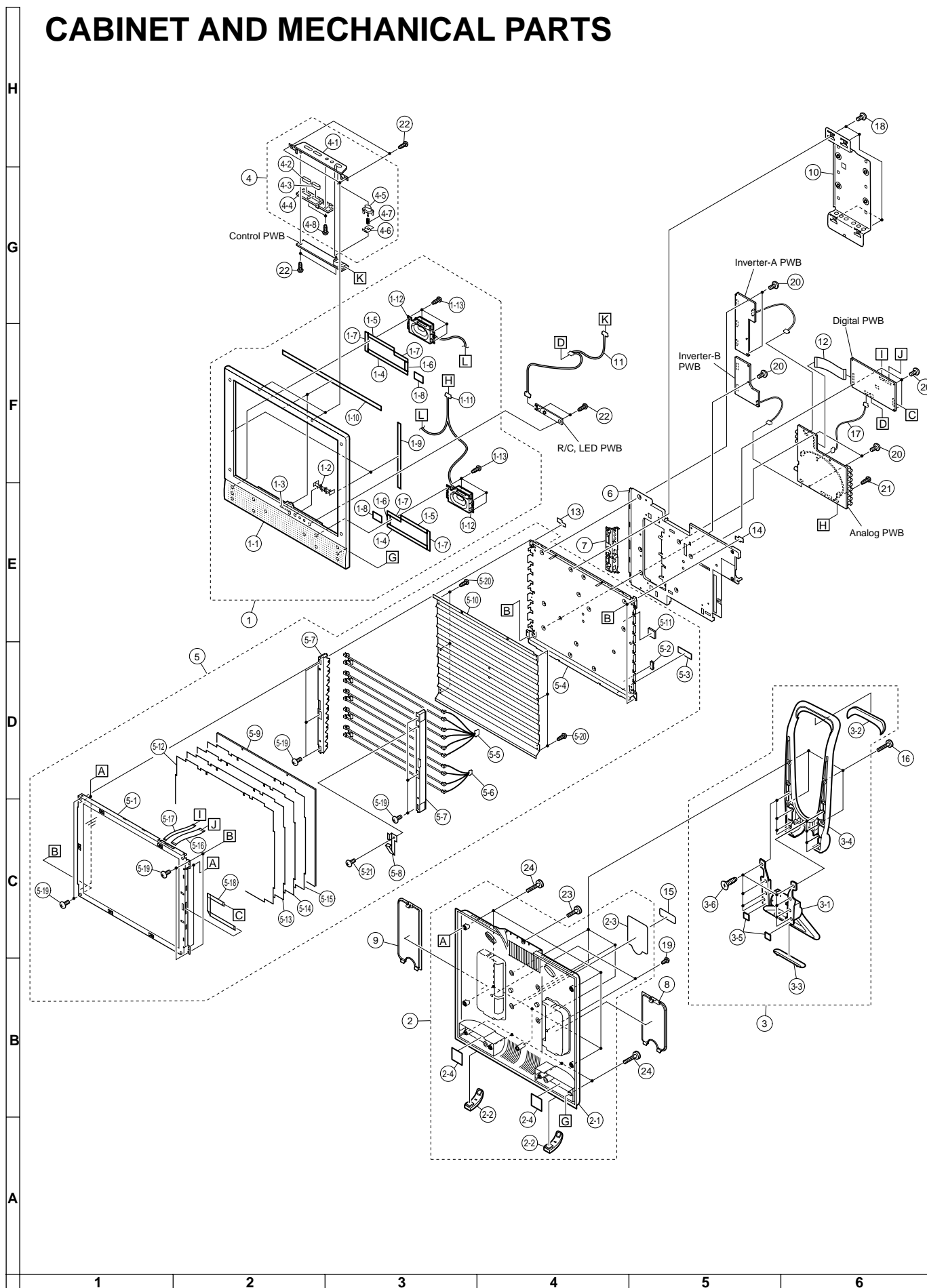
△ F6703	QFS-B1021GEZZ	J	Fuse, 1A/125V	AE
△ F6704	QFS-B1021GEZZ	J	Fuse, 1A/125V	AE
FH6706	QFSDH1002CEZZ	J	Fuse Holder	AA
FH6707	QFSDH1002CEZZ	J	Fuse Holder	AA
FH6708	QFSDH1002CEZZ	J	Fuse Holder	AA
FH6709	QFSDH1002CEZZ	J	Fuse Holder	AA
P6703	QPLGN0155FJZZY	J	Plug, 3-pin	AE
P6704	QPLGN0155FJZZY	J	Plug, 3-pin	AE
P6706	QCNCW-A463WJZZ	J	Connecting Cord (P3704)	AD

Ref. No.	Part No.	★	Description	Code
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CABINET AND MECHANICAL PARTS

1	CCABAA072WJ01	J	Cabinet A Ass'y (LC-20E1U)	BG
1	CCABAA072WJ02	J	Cabinet A Ass'y (LC-20E1UB)	BG
1	CCABAA072WJ03	J	Cabinet A Ass'y (LC-20E1UW)	BL
1-1	<i>Not Available</i>	—	Cabinet A	—
1-2	GCOVA2020CEZZ	J	R/C LED Cover	AF
1-3	<i>Not Available</i>	—	"SHARP" Badge	—
1-4	PSPAGA027WJZZ	J	Spacer, x2	AC
1-5	PSPAGA028WJZZ	J	Spacer, x2	AB
1-6	PSPAGA029WJZZ	J	Spacer, x2	AB
1-7	PSPAGA030WJZZ	J	Spacer, x4	AB
1-8	PSPAHA040WJZZ	J	Spacer, x2	AD
1-9	PSPAHA041WJZZ	J	Spacer, x2	AD
1-10	PSPAH0678CEZZ	J	Spacer, x2	AA
1-11	QCNCW-A543WJZZ	J	Connecting Cord	AE
1-12	VSP7040PB578S	J	Speaker, x2	AR
1-13	XETSD40P12000	J	Screw, x8	AB
2	CCABBA040WJ01	J	Cabinet B Ass'y (LC-20E1U)	BC
2	CCABBA040WJ02	J	Cabinet B Ass'y (LC-20E1UB)	BF
2	CCABBA040WJ03	J	Cabinet B Ass'y (LC-20E1UW)	BF
2-1	<i>Not Available</i>	—	Cabinet B	—
2-2	GLEGGA007WJSA	J	Leg, x2	AG
2-3	HiNDPA095WJSA	J	Model Label (LC-20E1U)	AG
2-3	HiNDPA168WJSA	J	Model Label (LC-20E1UB)	AG
2-3	HiNDPA169WJSA	J	Model Label (LC-20E1UW)	AG
2-4	PSPAGA043WJZZ	J	Spacer, x2	AC
3	CDAi-A014WJ01	J	Stand(LC-20E1U/UW)	BG
3	CDAi-A014WJ02	J	Stand(LC-20E1UB)	BG
3-1	<i>Not Available</i>	—	Stand, Base	—
3-2	GCOVA1945CESA	J	Stand Grip	AK
3-3	GLEGGA004WJSA	J	Leg, x1	AH
3-4	JHNDP0103CESA	J	Stand Handle (LC-20E1U/UW)	AX
3-4	JHNDP0103CESB	J	Stand Handle(LC-20E1UB)	AX
3-5	PSPAZ0415CEZZ	J	Spacer, x2	AB
3-6	XESSN40P10000	J	Screw, x8	AB
4	CCOVAA084WJ01	J	Top Cover Ass'y(LC-20E1U)	AR
4	CCOVAA084WJ02	J	Top Cover Ass'y (LC-20E1UB)	AT
4	CCOVAA084WJ03	J	Top Cover Ass'y (LC-20E1UW)	AT
4-1	<i>Not Available</i>	—	Top Cover	—
4-2	GCOVA1943CEKA	J	Button Cover(VOL)	AD
4-3	GCOVA1943CEKB	J	Button Cover(CH)	AD
4-4	JBTN-A012WJKA	J	Operation Button	AE
4-5	JBTN-2076CEKA	J	Power Button	AE
4-6	LHLDZA027WJKZ	J	Power Button Holder	AE
4-7	MSPRCA014WJFW	J	Power Button Spring	AB
4-8	XEBSD30P08000	J	Screw, x2	AA
5	<i>Not Available</i>	—	20" LCD Panel Unit Ass'y	—
5-1	RLCDA014WJZZ	J	20" LCD Panel Unit	DT
5-2	LHLDW1173CEZZ	J	Wire Holder, x1	AD
5-3	PMLT-0402CEZZ	J	Spacer, x1	AC
5-4	PSLDM4685CEFW	J	Back Shield Panel	AX
△ 5-5	KLMP-0124CEZZ	J	Lamp Unit-A	BH
△ 5-6	KLMP-0125CEZZ	J	Lamp Unit-B	BD
5-7	LHLDZ2176CEZZ	J	Lamp Fixing Holder, x2	AL
5-8	MSPRP1220CEFW	J	ITO Earth Spring	AC
5-9	PCOVU0107CEZZ	J	Diffusion Plate	AY
5-10	PMiR-0296CEZZ	J	Reflection Mirror	AX

CABINET AND MECHANICAL PARTS



Ref. No.	Part No.	★	Description	Code
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CABINET AND MECHANICAL PARTS (Continued)

5-11	PMLT-0377CEZZ	J	Spacer	AD
5-12	PSHEP0286CEZZ	J	Reflection/Deflection Sheet	BP
5-13	PSHEP0287CEZZ	J	Prism Sheet	BC
5-14	PSHEP0288CEZZ	J	Diffusion Sheet	AQ
5-15	PSHEP0289CEZZ	J	ITO Sheet	AY
5-16	QCNW-6054CEZZ	J	Connecting Cord	AD
5-17	QCNW-6055CEZZ	J	Connecting Cord	AD
5-18	QCNW-6056CEZZ	J	Connecting Cord	AF
5-19	XBBS030P08000	J	Screw, x10	AA
5-20	XEBSD20P05000	J	Screw, x6	AA
5-21	XEBSD30P08000	J	Screw, x1	AA
6	GCOVA2106CEKA	J	Chassis Frame(LC-20E1U)	AU
6	GCOVA2106CEKB	J	Chassis Frame (LC-20E1UB)	AU
6	GCOVA2106CEKC	J	Chassis Frame (LC-20E1UW)	AU
7	GCOVA2103CEKA	J	Chassis Frame Cover (LC-20E1U)	AG
7	GCOVA2103CEKB	J	Chassis Frame Cover (LC-20E1UB)	AG
7	GCOVA2103CEKC	J	Chassis Frame Cover (LC-20E1UW)	AG
8	GCOVAA069WJKA	J	Terminal Cover(S) (LC20E1U)	AL
8	GCOVAA069WJKB	J	Terminal Cover(S) (LC20E1UB)	AN
8	GCOVAA069WJJC	J	Terminal Cover(S) (LC20E1UW)	AN
9	GCOVAA070WJKA	J	Terminal Cover(L) (LC-20E1U)	AK
9	GCOVAA070WJKB	J	Terminal Cover(L) (LC-20E1UB)	AM
9	GCOVAA070WJJC	J	Terminal Cover(L) (LC-20E1UW)	AN
10	LANGT9032CEFW	J	Reinforcement Angle	AR
11	QCNW-A695WJZZ	J	Connecting Cord	AG
12	QCNW-6058CEZZ	J	Connecting Cord	AE
13	PMLT-0404CEZZ	J	Spacer, x1	AD
14	PMLT-0405CEZZ	J	Spacer, x1	AD
15	TLABNA061WJZZ	J	Serial No. Label(LC-20E1U)	AE
15	TLABNA126WJZZ	J	Serial No. Label (LC-20E1UB)	AD
15	TLABNA127WJZZ	J	Serial No. Label (LC-20E1UW)	AD
16	LX-BZ3442CEFF	J	Screw, x4 (LC-20E1U/UB)	AB
16	LX-BZ3442CEFN	J	Screw, x4(LC-20E1UW)	AB
17	QCNW-A267WJZZ	J	Connecting Cord	AK
18	XBBS040P06000	J	Screw, x4	AA
19	XBBS030P06000	J	Screw, x2	AA
20	XBPSD30P10JS0	J	Screw, x8	AA
21	XEBSD30P08000	J	Screw, x1	AA
22	XEBSD30P12000	J	Screw, x6	AA
23	XEBSF40P12000	J	Screw, x1	AB
24	XEBSF40P20000	J	Screw, x9	AB

Ref. No.	Part No.	★	Description	Code
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SUPPLIED ACCESSORIES

	LHLDW0109CESA	J	Cable Clamp, x1 (LC-20E1U/UW)	AD
	LHLDW0109CESB	J	Cable Clamp, x1 (LC-20E1UB)	AD
△	QACCD3097CEPA	J	AC Cord	AQ
	QCNWG0003CEPA	J	Antenna Cable	AM
	RRMCGA077WJSA	J	Infrared R/C Unit (LC-20E1U)	AT
	RRMCGA077WJSB	J	Infrared R/C Unit (LC-20E1UB)	AU
	RRMCGA077WJSC	J	Infrared R/C Unit (LC-20E1UW)	AX
	TiNS-A158WJZZ	J	Operation Manual	AW
△	UADP-0243CEPZ	J	AC Adapter	BL

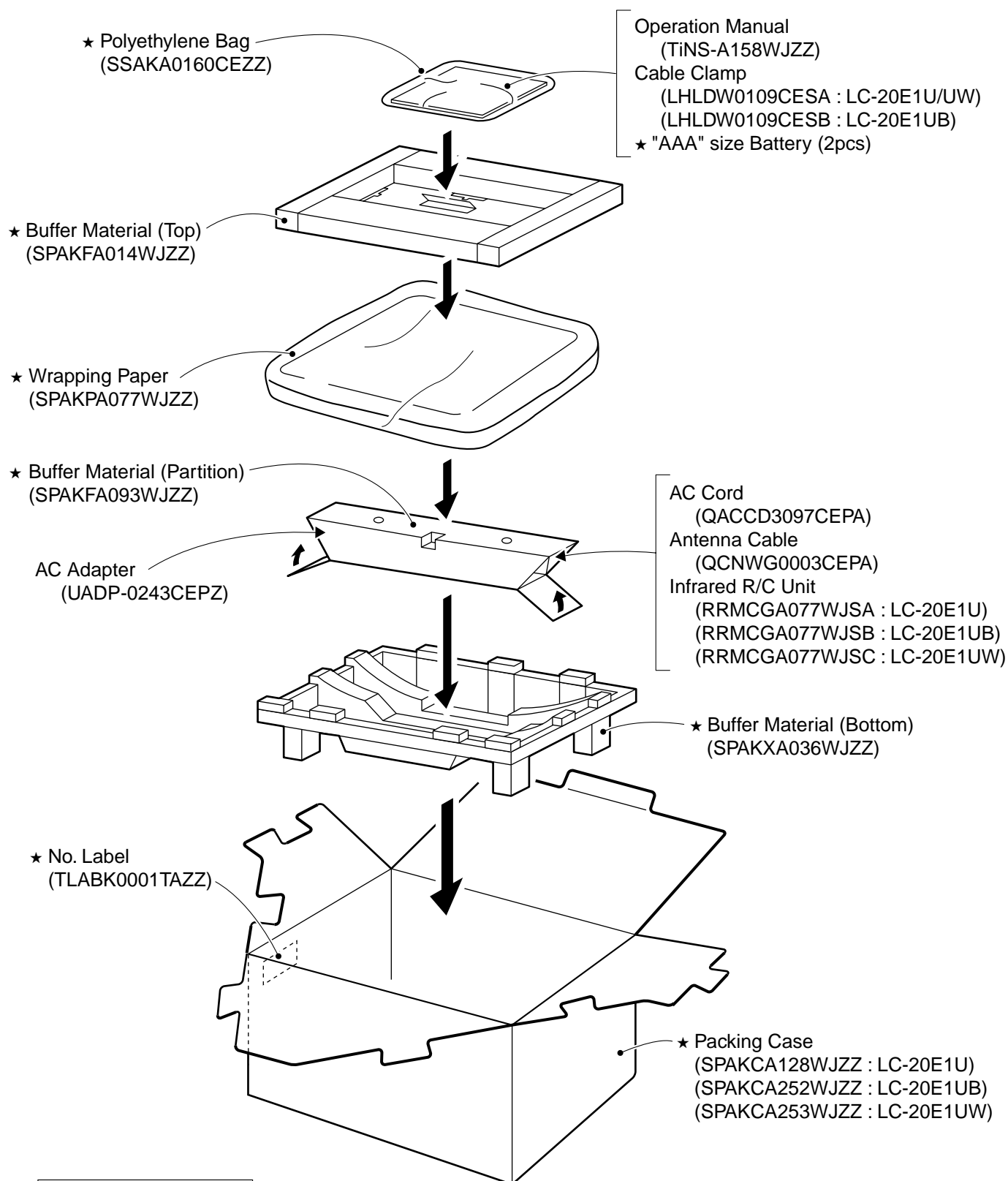
PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKCA128WJZZ	—	Packing Case(LC-20E1U)	—
SPAKCA252WJZZ	—	Packing Case(LC-20E1UB)	—
SPAKCA253WJZZ	—	Packing Case(LC-20E1UW)	—
SPAKFA014WJZZ	—	Buffer Material(Top)	—
SPAKFA093WJZZ	—	Buffer Material(Partition)	—
SPAKPA077WJZZ	—	Wrapping Paper	—
SPAKXA036WJZZ	—	Buffer Material(Bottom)	—
SSAKA0160CEZZ	—	Polyethylene Bag	—
TLABK0001TAZZ	—	No. Label	—

SERVICE JIGS (USE FOR SERVICING)

QCNW-A552WJZZ	J	Extention Cable 5-pin (P2004-P3702)	AG
QCNW-A553WJZZ	J	Extention Cable 30-pin (SC1203-LCD)	BA
QCNW-A555WJZZ	J	Extention Cable 20-pin (SC1201-LCD)	AU
QCNW-A556WJZZ	J	Extention Cable 50-pin, x2 (SC2001-SC3403) (SC1202-LCD)	AU

PACKING OF THE SET



★ Not Replacement Item

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